3.15 Utilities and Services Systems

As a result of the analysis undertaken in the Initial Study for the proposed 2009 Master Plan, LACCD determined that the proposed project may result in environmental impacts to Utilities and Services Systems. Therefore, this issue is addressed in detailed analysis in this EIR. This analysis was undertaken to identify opportunities to avoid, reduce, or otherwise mitigate potential significant impacts to Utilities and Services Systems and to identify potential alternatives.

The analysis of Utilities and Services Systems consists of a summary of the regulatory framework that guides the decision making process, existing conditions at the proposed 2009 Master Plan area, thresholds for determining if the proposed 2009 Master Plan would result in significant impacts, anticipated impacts (direct, indirect, and cumulative), mitigation measures, and level of significance after mitigation. The potential for impacts to Utilities and Services Systems at the proposed 2009 Master Plan site have been evaluated in accordance with Appendix G of CEQA Guidelines.¹

3.15.1 Setting

3.15.1.1 Regulatory Setting

State

California Urban Water Management Planning Act

The California Urban Water Management Planning Act (CUWMPA) requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. CUWMPA states that every urban water supplier that provides water to 3000 or more customers, or that provides more than 3000 acre-feet of water service annually, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. CUWMPA describes the contents of Urban Water Management Plans, as well as methods for urban water suppliers to adopt and implement the plans.²

Senate Bill 610

Senate Bill 610 (Water Code Section 10910), as an amendment to the Urban Water Management Planning Act, mandates that a water supply assessment be furnished to local governments for inclusion in any environmental documentation for projects that exceed the water demand of a 500 unit residential development, or the equivalent. Because the overall increase in water demand attributed to the proposed project would not exceed Senate Bill 610 standards, a water supply assessment is not required.

State of California Waste Management AB 939 - Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) required that all Counties have an approved County-wide Integrated Waste Management Plan (CIWMP) intended to implement strategies to divert 50 percent of solid waste from landfill disposal through source

¹ California Code of Regulations, Title 24, Division 6, Chapter 3, Sections 15000-15387. Available at http://ceres.ca.gov/topic/env_law/ceqa/guidelines/ (May 20, 2009)
3.0 Setting, Environmental Impact Analysis, Mitigation Measures

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reduction, recycling, and composting by the year 2000. AB 939 established the California Integrated Waste Management Board (CIWMB) to provide effective and coordinated management of the state’s solid waste system and authorized CIWMB to monitor and enforce the mandates of AB 939. The Act established a hierarchy for integrated waste management that consists of source reduction, recycling and composting, transformation, and environmentally safe disposal.

AB 939 further requires each city and county to conduct a Solid Waste Generation Study and prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the AB 939 goals. The SRRE would contain programs and policies for fulfillment of these goals, including 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 streams, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are updated and upgraded, as appropriate. Cities and counties in California are required to submit annual reports to CIWMB that serve as updates on each jurisdiction’s progress towards meeting AB 939 goals.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each “development project” to provide adequate storage area for collection and removal of recyclable materials. As currently there is no County ordinance implementing the Act, a model ordinance developed by CIWMB is not in effect within unincorporated areas of the County. The requirements of the Act and the model ordinance include: unobstructed access for collection vehicles and personnel; the provision of an adequate number of bins or containers to allow for the collection and loading of recyclable materials generated by a project; and the protection of recyclables, containers, and bins from scavenging and the natural elements. Recycling areas are required to be located so that they are at least as convenient for depositing, collecting, and loading recyclable materials as the locations where solid waste is collected and loaded. Where feasible, areas for collecting and loading recyclable materials should be adjacent to the solid waste collection areas.

Regional

Los Angeles Community College District

LACCD administrative regulations require design plans for district facilities to be reviewed and approved by the Division of the State Architect pursuant to the California Education Code. These District regulations also require grading plans, drainage plans, and on- and off-site improvements associated with a district facility to be processed pursuant to California Government Code Section 53097. Construction plans for grading, drainage, and on- and off-site improvements are submitted to the local city or county for review and approval, generally through the grading permit process. The District also demonstrates compliance with local requirements for water supply and water

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3 California State Senate. Available at: http://info.sen.ca.gov/pub/07-08/bill/sen/sb_1401-1450/sb_1405_bill_20080619_amended_asm_v94.html
4 California Integrated Waste Management Board, Ordinances, Resolutions, and Policies. Available at: http://www.ciwmb.ca.gov/lglibrary/LocalDocs/Policy.htm
5 Recycling Space Allocation Guide. Available at: http://www.ciwmb.ca.gov/Publications/default.asp?pubid=832
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conveyance through the design review process. Projects in the proposed 2009 Master Plan area need to demonstrate compliance with County of Los Angeles and City of Los Angeles water system requirements in conjunction with review and approval of construction plans.

**Los Angeles Community College District Green Building Policy**

The District’s Board of Trustees adopted a Green Building Policy for the construction and renovation of its college campuses. Its policy is predicated on the sustainable building standards administered nationally through the U.S. Green Building Council. The District’s standards are outlined in its *Sustainable Building Principles, Standards, and Processes Guidelines* and its *Energy Policy – Amendment III Sustainable Standards – New Construction*. Policy standards related to solid waste management include:

- Consider using products made from renewable resources.
- Require contractor to utilize a construction waste recycling plan.
- Use prefabricated systems to reduce on-campus waste.
- Establish a campus-wide dual bin system for recyclables and trash.

**County of Los Angeles General Plan Public Services and Facilities Element**

The County of Los Angeles General Plan Public Services and Facilities Element sets forth objectives and policies relative to water resources and services. County policies seek to provide a protected supply of County water resources; a clean supply of water to satisfy current and future demand; an updated and reliable network of wastewater systems; and minimal waste and pollution. Adverse impacts on the natural, social, and built environment arising from water development are to be anticipated and mitigated where they cannot be avoided. The design and construction of new water systems should enhance the appearance of the neighborhoods in which they are located and minimize negative environmental impacts.

The Public Services and Facilities Element identified policies to improve service efficiency, service quality, and the development and implementation of new technologies. Applicable policies include:

- Policy PS 2.3: Effectively manage watersheds to balance growth and development with resource conservation and flood hazard mitigation.
- Policy PS 3.2: Require all development to provide a guaranteed supply of water.
- Policy PS 4.2: Promote innovative programs and techniques in wastewater management.
- Policy PS 5.1: Maintain an efficient, safe, and responsive waste management system that facilitates waste reduction while protecting the health and safety of the public.

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- Policy PS 5.6: Encourage recycling of construction and demolition debris generated by public and private projects.
- Policy PS 5.7: Ensure adequate and regular waste and recycling collection services.

**City of Los Angeles General Plan Framework Infrastructure and Public Services**

The policies of the Framework Infrastructure and Public Services Element⁸, in all instances, seek solutions to public infrastructure and service deficiencies, including their expansion commensurate with the levels of demands experienced. Water and solid waste policies adopted by the City of Los Angeles that are relevant to the proposed project include:

- Policy 9.8.1: Monitor water usage and population and job forecast to project future water needs.
- Policy 9.1.1: Monitor wastewater generation.
- Policy 9.2.2: Maintain wastewater treatment capacity commensurate with population and industrial needs.
- Policy 9.2.4: Continue to implement programs to upgrade the wastewater collection system to mitigate existing deficiencies and accommodate the needs of growth and development.
- Objective 9.12: Support integrated solid waste management efforts.

**Urban Water Management Plan**

Efforts by the City of Los Angeles to advance its water mission are described in the 2005 Urban Water Management Plan and related annual reports issued by the Los Angeles Department of Water and Power (LADWP). The implementing actions include pursuing cost-effective water conservation and recycling projects to increase supply reliability, protect and treat groundwater supplies, ensure access to reliable and affordable supplemental water supplies, maintain the operational integrity of the City’s water distribution systems, and secure necessary funds to develop alternative water supplies.⁹

**Solid Waste Integrated Resources Plan**

The Solid Waste Integrated Resources Plan (SWIRP) is a stakeholder driven planning process to develop a 20-year master plan to reduce waste, increase recycling, and manage trash in the City of Los Angeles. This program is being led by the City of Los Angeles Department of Public Works, Bureau of Sanitation. This plan will be the road map for how the City will manage the solid waste resources generated in the City through the year 2030. The goal of SWIRP is to develop a master plan that will detail policies, programs, infrastructure, regulations, incentives, new green jobs, technological innovation, and financial strategies. With SWIRP, the City plans to achieve 75 percent diversion (recycling rate) by 2013; operate an alternative technology facility by 2010; convert the

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Bureau of Sanitation’s fleet of 750 trucks to run on clean fuels by 2010; and reduce greenhouse gas emission to 35 percent below 1990 levels by 2030.10

3.15.2 Environmental Setting

3.15.2.1 Regional

Water

LADWP is the primary water service purveyor to the LAMC campus. Annual water demand in the LADWP service area is approximately 690,450 acre-feet (af).11 As shown on Figure 3.15-1, governmental uses, including higher education institutions like LAMC, consumed approximately 44,000 af (7%) of the water provided by LADWP during fiscal year 2004.

Figure 3.15-1 Water Use in the LADWP Service Area

The LADWP receives its water from three principal water supply sources. The Los Angeles Aqueduct supplies approximately 230,000 af (34%), local groundwater sources supply approximately 95,000 af (15%), and Metropolitan Water District (MWD) supplies approximately 360,000 af (51%). The quantity of water supplies received from each source can fluctuate from year to year. Generally, when water deliveries from the Los Angeles Aqueduct have been low, the volume of purchased water from MWD has increased. Water conservation, water recycling programs, and great reliance on MWD water supplies are among the measures identified by LADWP to keep the gap between future demand projections and supply needs at a minimum. LADWP accesses local groundwater

supplies through pumping rights in the San Fernando, Central, and West Coast Basins, including in the community of Sylmar.\textsuperscript{12}

On June 4, 2008, the Governor of the State of California declared a statewide drought, issued an Executive Order S-06-08, and directed the Department of Water Resources (DWR) and other entities to take immediate action to address the situation. The Executive Order directs the DWR to:

- Facilitate water transfers to respond to emergency shortages across the state.
- Work with local water districts and agencies to improve local coordination.
- Help local water districts and agencies improve water efficiency and conservation.
- Coordinate with other state and federal agencies and departments to assist water suppliers, identify risks to water supply, and help farmers suffering losses.
- Expedite existing grant programs to help local water districts and agencies conserve.

The Executive Order also encourages local water districts and agencies to promote water conservation. They are encouraged to work cooperatively on the regional and state level to take aggressive, immediate action to reduce water consumption locally and regionally.

LAMC is located within the LADWP 1729-foot elevation above sea level service zone and is supplied water from LADWP Alta Vista Tanks 1 and 2 located at the north end of Hubbard Street. Water is conveyed to the Main Campus through the LADWP 16-inch primary water line within Hubbard Street. A system of 8-inch and 2-inch distribution lines within the campus connects to the primary water line where it crosses the Hubbard Street/Lexicon Avenue intersection.\textsuperscript{13} The 8-inch distribution line conveys water for domestic use and fire protection, and has a maximum flow capacity of 2500 gallons per minute (gpm). The 2-inch line has a maximum flow capacity of 160 gpm and is used primarily for irrigation. The East Campus is served by two LADWP water mains, 6-inch and 8-inch diameter, located in Harding Street near the intersection of Eldridge Avenue.

The existing water pressure available is 157 pounds per square inch (psi) statis and 132 psi residual. In addition to the primary water line at Hubbard Street, there is a backflow assembly (back-siphonage to prevent contaminants through the water service connection) and a 6-inch water line serving the north side of the campus. No reclaimed water lines serve LAMC.

To ascertain the existing LAMC water consumption, utility bills were provided by LAMC.\textsuperscript{14} As shown in Table 3.15-1, existing water consumption at the campus is approximately 38,409 gallons per day (gpd). Water use at the East Campus facilities and the Athletic Fields has not yet been initiated. Water use at the Nursery Property is approximately 2000 gpd, based on a similar sized type of use.

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\textsuperscript{13} LADWP records show a combined 2-inch water meter and 8-inch detector check in Hubbard Street approximately 621 feet east of Eldridge Avenue, where connection to the 16-inch primary water line occurs.
\textsuperscript{14} Utility bills were obtained for July 2008 through January 2009. These statements include water demand for all LAMC usage, including irrigation.
Table 3.15-1 Existing Water Consumption Estimate

<table>
<thead>
<tr>
<th>Location</th>
<th>Water Use (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Campus</td>
<td>38,409</td>
</tr>
<tr>
<td>East Campus</td>
<td>0</td>
</tr>
<tr>
<td>Nursery Property</td>
<td>2,000</td>
</tr>
<tr>
<td>Athletic Fields</td>
<td>0</td>
</tr>
<tr>
<td>Eldridge Streetscape Improvements</td>
<td>0</td>
</tr>
</tbody>
</table>

**Wastewater**

The City of Los Angeles Department of Public Works Bureau of Sanitation (LADPWBS) maintains the sewer lines throughout the City, including the proposed 2009 Master Plan site. Los Angeles operates and maintains the largest wastewater collection system in the United States. It serves a population of more than four million within a 600-square-mile service area that includes Los Angeles and 29 contracting cities and agencies. The City's more than 6500 miles of public sewers convey approximately 550 million gpd of flow from residences and businesses to the City's four wastewater treatment and water reclamation plants.\(^{15}\)

The City of Los Angeles is currently planning and designing more than 150 sewers and sewer-related projects to be built over the next decade as part of the 10-Year LA Sewers Construction Program and the Collection System Settlement Agreement (CSSA).\(^ {16}\) The CSSA is a legal agreement that defines the maintenance and construction projects and schedules. These include sewers that are very old, seriously deteriorating, or too small for the area they serve. Most sewers are in good working order but some are being repaired or replaced because many were built in the early part of the 20\(^{th}\) century. As the sewer system ages, pipes deteriorate from years of scouring and corrosion. Additionally, explosive population growth in many parts of the City has caused some sewers to run at or near capacity for an extended period of time.

The Hyperion Treatment Plant receives effluent from the greater Los Angeles metropolitan area and provides both primary and secondary wastewater treatment. On average, the plant treats approximately 362 million gallons per day (mgd) and has a design capacity of 450 mgd. The Tillman Water Reclamation Plant (TWRP) intercepts and treats sewage generated from the project site. On average, the plant treats approximately 67 mgd and has a design capacity of 80 mgd. LADPWBS maintains the sewer lines to LAMC. An 8-inch main is located at Eldridge Avenue between Bombay Street and Pasha Street and between Cranston Avenue and Gridley Street. Campus lines are connected to the 8-inch sewer line at Pasha Street, which was constructed circa 1987. A 10-inch sewer main is located at Hubbard Street. However, the LAMC campus is not connected to this main.

To ascertain the existing LAMC wastewater generation, utility bills were provided by the LAMC.\(^ {17}\) Wastewater consumption at the campus is approximately 9463 gpd. Current wastewater generation

\(^{15}\) City of Los Angeles, Department of Public Works. City Sewers. Available at: http://www.lasewers.org/sewers/about/index.htm

\(^{16}\) City of Los Angeles, Department of Public Works. Future Projects. Available at: http://www.lasewers.org/sewers/future_projects/index.htm

\(^{17}\) Utility bills were obtained for July 2008 through January 2009. These statements include water demand for all LAMC usage, including irrigation.
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at the Nursery Property is unknown. Wastewater generation at the East Campus facilities and the Athletic Fields has not yet been initiated.

Solid Waste

The Sanitation Districts of Los Angeles County (Sanitation Districts) oversees a system of landfills, recycling centers, transfer/materials recovery facilities, and gas-to-energy facilities. Available statistics on countywide waste disposal show a majority of the waste generated within Los Angeles County (9,160,898 tons) was disposed of at landfills within the county, 587,451 tons was delivered to transformation facilities and no solid waste was exported from the State for disposal. Of the 9.7 million tons of waste generated in Los Angeles County, 3,941,483 tons were generated within the City of Los Angeles; 3.86 million tons were buried in county landfills, and 81,924 tons were delivered to transformation (waste-to-energy) facilities in the Los Angeles and Stanislaus counties.

Landfills within Los Angeles County are classified either as Class III landfills or Unclassified (inert) landfills. Class III landfills accept all types of non-hazardous solid waste. Major Class III landfills are permitted to receive more than 250,000 tons of solid waste per year while minor Class III landfills are permitted to receive less than 250,000 tons of solid waste per year. Unclassified landfills accept only inert waste such as soil, concrete, asphalt, and other construction and demolition debris. There are 10 major Class III landfills and 4 unclassified landfills in Los Angeles County. As shown in Table 3.15-2, the remaining disposal capacity is approximately 251,542,063 cubic yards (cy) at Class III landfills and 37,500,000 cy at unclassified landfills.

There are two landfills being developed outside of Los Angeles County, which would add disposal capacity to the Sanitation Districts. In August of 2000, the Sanitation Districts entered into Purchase and Sale Agreements on the Mesquite Regional Landfill in Imperial County and the Eagle Mountain Landfill in Riverside County. Construction for the Mesquite Regional Landfill is currently underway and is expected to be open for rail shipments of waste in 2009. When fully operational, the Mesquite Landfill would be able to accept 20,000 tons per day of waste with a total capacity of approximately 600 million tons and projected life of 100 years. The Eagle Mountain Landfill is expected to accommodate 20,000 tons per day with a total capacity of approximately 708 million tons and a projected life of 117 years. It is unclear if the Sanitation Districts still intends to make Eagle Mountain a landfill. As of 2009, the project has yet to begin.

To meet the long-term solid waste disposal needs of Los Angeles County, proposed landfill expansion projects, utilization of future landfill facilities (Mesquite and Eagle Mountain), and

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19 As defined by California Code of Regulations, Title 23, Section 2524.
20 Sanitation Districts of Los Angeles County. Available at: http://www.lacsd.org/civica/filebank/blobload.asp?BlobID=2901
22 Mesquite Regional Landfill. Available at: http://www.mrlf.org/
development of conversion technologies, continued aggressive implementation of waste diversion programs to extend the lifespan of existing disposal facilities would be needed.\textsuperscript{23}

Data on existing solid waste generation at LAMC were obtained from July 2008 through April 2009 tonnage reports for the college. According to the report, LAMC generated 128 tons of solid waste during the reporting period. Solid waste at LAMC is collected for disposal at a landfill and is also diverted through the implementation of various source reduction and recycling programs at the campus. These programs separate recyclables, such as beverage containers, cardboard, glass, newspaper, office paper, plastics, and scrap metal, for collection and handling as a resource recovery material.

Solid waste collection, disposal, and resource recovery services at LAMC are outsourced directly by the District to a private waste hauler. Solid waste collection is provided by North State Environmental and recyclable material collection is provided by Wyerhaeuser.

<table>
<thead>
<tr>
<th>Table 3.15-2 Remaining Disposal Capacity of Existing Landfills in Los Angeles County as of 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Class III</strong></td>
</tr>
<tr>
<td>Puente Hills</td>
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<tr>
<td>Sunshine Canyon</td>
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<tr>
<td>Chiquita Canyon</td>
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<td>Scholl Canyon c</td>
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<tr>
<td>Calabasas</td>
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<td>Lancaster</td>
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<td>Antelope Valley</td>
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<tr>
<td>Burbank e</td>
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<tr>
<td>Pebble Beach</td>
</tr>
<tr>
<td>San Clemente e</td>
</tr>
<tr>
<td><strong>Class III Total</strong></td>
</tr>
<tr>
<td><strong>Unclassified</strong></td>
</tr>
<tr>
<td>Nu-way Live Oak Landfill</td>
</tr>
<tr>
<td>Azusa Land Reclamation</td>
</tr>
<tr>
<td>Peck Road Gravel Pit</td>
</tr>
<tr>
<td><strong>Unclassified Total</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- Limited to Scholl Canyon Watershed as defined by City Ordinance 4782
- Limited to the City of Burbank use
- Owned and operated by U.S. Navy

3.15.3 Significance Thresholds

As noted in the Initial Study, for the purposes of this EIR, and in accordance with Appendix G of the CEQA Guidelines, an impact to Utilities and Services Systems is considered significant if the proposed project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB).
- 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.
- 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.
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
- Result in determination by the wastewater treatment provider that it has inadequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

3.15.4 Environmental Impact Analysis

3.15.4.1 Methodology

Water

Proposed water consumption was estimated using distinct assumptions and calculations unique to the Main Campus, East Campus, Nursery Property, Eldridge Avenue Streetscape Improvements, and Athletic Fields use. These estimates of project-related water demand and the information presented on the existing water supply and conveyance systems were used to assess the project impact on water service, including water supply and delivery systems.

To estimate the future water demand of LAMC, a generation factor was created based on the existing water consumption. By dividing existing water demand (38,409 gpd) by the existing average daily campus population for spring 2009 (3342), a generation factor of 11 gpd per person was derived. Average daily campus population is based on the average number of students and employees on campus per day (including weekends). This number (3342) was derived by performing an unduplicated headcount of the number of students on campus during the busiest times of the day (morning and evening, Monday through Sunday) and adding those numbers together and dividing them by the number of days students were in attendance. The average daily campus population estimate was defined and used because the water demand is much greater during weekdays than on weekends. Using a number based solely on weekday campus population would result in an inflated number, and therefore present a worst-case scenario.
To calculate the increase in future water demands of the Athletic Fields, two separate factors were utilized: one for irrigation and one for ancillary buildings. Water demand for irrigation of the Athletic Fields is based on the square footage of the fields. The amount, 8333 gpd, represents the total irrigation demand for the fields rather than the increase in demand over the existing condition as no demand is currently generated on the undeveloped site. The generation factor for the ancillary buildings was derived by multiplying the unit water generation factor of 120 gpd per 1000 square feet for a type of use comparable to the project by 125 percent for a generation factor of 150 gpd per 1000 square feet.

To calculate the future water demand from temporary and long-term development of the Nursery Property, a generation factor of 150 gpd/1000 square feet was used. Temporary use of the Nursery Property for modular buildings would require approximately 864 gpd of water. Permanent development of the Nursery Property for a College Programs and Activities Center would require approximately 3,000 gpd of water. According to LAMC, water demand for landscape irrigation and water fountains from Eldridge Avenue Streetscape Improvements would be negligible.

**Wastewater**

Proposed wastewater generation was estimated using distinct assumptions and calculations unique to LAMC use and the Athletic Fields use. These estimates of project-related wastewater generation and the information presented on the existing wastewater generation and conveyance systems were used to assess the project impact on wastewater service, including wastewater generation and conveyance systems.

To estimate the future wastewater generation of LAMC, a generation factor was created based on the existing wastewater generation. By dividing existing wastewater generation (9463 gpd) by existing average daily campus population for spring 2009 (3342 people), a generation factor of 2.8 gpd per person was derived. Average daily campus population is based on the average number of students and employees on campus per day (including weekends). This number (3342) was derived by performing an unduplicated headcount of the number of students on campus during the busiest times of the day (morning and evening, Monday through Sunday) and adding those numbers together and dividing them by the number of days students were in attendance. The average daily campus population estimate was defined and used because the wastewater generation is much greater during weekdays than on weekends.

To estimate the future wastewater generation of the Athletic Fields, a generation factor for a type of use comparable to the project was utilized. The generation factor used is 120 gpd per 1000 square feet.

To calculate the future water demand from temporary and permanent use of the Nursery Property, a generation factor of 120 gpd/1000 square feet was used. Temporary use of the Nursery Property with bungalows would generate approximately 691 gpd of wastewater. Development of the Nursery Property for a College Programs and Activities Center would generate approximately 2400 gpd of wastewater.

**Solid Waste**

To estimate future solid waste generation, a generation factor was created based on the existing solid waste generation. By dividing existing solid waste generation (1191 pounds per day [ppd]) by existing
average daily campus population for spring 2009 (3342 people), a generation factor of 0.36 ppd per person was derived. To be conservative, this factor was increased to 0.5 ppd per person, which is consistent with the estimated solid waste generation factor for institutions/educational facilities. This solid waste generation factor (0.5 ppd per person) is used to analyze the solid waste impacts associated with the proposed operation of LAMC in 2015. To analyze the solid waste impacts associated with the operation of the proposed Athletic Fields, a conservative estimate of 1040 cy per year was used.

3.15.4.2 Campus Impacts

Construction Impacts

Exceed Wastewater Treatment Requirements

The Tillman Water Reclamation Plant, which receives and treats wastewater flows from the proposed 2009 Master Plan site, is expected to comply with RWQCB wastewater treatment requirements. Because the maximum number of construction workers would be approximately 50, wastewater volume from the proposed 2009 Master Plan construction would be minor. Therefore, construction of the proposed project is not expected to negatively affect Tillman Water Reclamation Plant’s operations. There would be a less-than-significant construction impact.

Construction or Expansion of Water or Wastewater Treatment Facilities

No construction of water or wastewater facilities would be needed to serve the proposed 2009 Master Plan facilities. Some minor adjustments to water lines or fire hydrants may be made along Eldridge Avenue to accommodate streetscape improvements. No environmental impacts associated with construction of water (water lines and fire hydrants) or wastewater facilities are expected to occur. There would be no construction impact.

Construction or Expansion of Storm Water Drainage Facilities

Some minor adjustments to storm drains may be made along Eldridge Avenue to accommodate streetscape improvements. During construction, erosion and sedimentation control plans would be prepared to ensure that no significant erosion or sedimentation impacts would occur during or after the improvements are made. Temporary erosion control measures to be implemented during construction may include minimizing existing vegetation removal; using temporary soil covers, such as hydroseeding, to protect exposed soil from wind and rain; and installing silt fencing, berms (i.e., sandbagging), and dikes to protect storm drain inlets and drainage courses. With implementation of these best management practices (BMPs), the proposed 2009 Master Plan would not substantially alter the existing drainage pattern of the site in a manner which would: (1) result in substantial erosion or siltation, (2) substantially increase the rate or amount of runoff resulting in flooding or the creation of runoff exceeding the capacity of existing or planned storm water drainage systems, or (3) provide substantial additional sources of pollutants. Therefore, impacts would be less than significant and no mitigation would be required.

Sufficient Water Supplies

Sufficient water would be made available for construction workers and for site watering from the Alta Vista Tanks to meet the water needs of the project site. Therefore, construction of the Main
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Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements would have a less-than-significant impact on water supply facilities.

**Wastewater Treatment Capacity**

On average, the Tillman Water Reclamation Plant treats approximately 67 mgd and has a design capacity of 80 mgd. The Tillman Water Reclamation Plant which receives and treats wastewater flows from the proposed 2009 Master Plan site has sufficient capacity to accommodate the increase in flow resulting from construction workers. Therefore, no impact is anticipated.

**Landfill Capacity**

Site preparation activities would generate waste from demolition of existing parking lots and buildings currently located on the Nursery Property. Construction would also generate waste from the remnants of unused building materials and packaging associated with these materials. Large waste disposal bins would be temporarily located on the proposed 2009 Master Plan site to contain the construction-related waste. Construction waste would be recycled or salvaged consistent with the LACCD-adopted policy concerning new construction as identified in the Proposed Amendment to III Sustainable Standards – New Construction of Sustainable Building-Principles, Standards and Processes. On-site vegetation not suitable for replanting would be ground for reuse as mulch within the site, to the extent feasible. This reuse would reduce the amount of construction-related waste. The policy establishes an energy efficiency target that would achieve an energy efficiency rate to exceed California Title 24 by 20 percent. The proposed 2009 Master Plan includes the following features which would reduce the amount of project-related solid waste:

- The project contractor(s) would recycle or salvage approximately 50 percent of the construction waste, to the extent feasible.
- On-site vegetation not suitable for replanting will be ground for reuse as mulch within the project site.
- Recycling bins will be provided within or near all new buildings on the project site.
- Separate receptacles for collection of recyclable materials will be provided in high traffic areas, such as food courts and student congregation areas.
- A solid waste bin with a capacity of up to 20 cy and separate receptacles for recyclable materials. The solid waste bin will be situated within a trash enclosure screened from view and accessible to waste haulers.

Unclassified landfills have a total remaining capacity of 37,500,000 cy which is sufficient to accommodate waste disposal related to the Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements. Furthermore, as of 2009, County Class III landfills had a remaining disposal capacity of 251,542,063 cy. Any solid waste generated by the proposed project would be adequately accommodated by unclassified landfills and County Class III landfills specified in the Master Plan. Therefore, construction of the proposed project would result in less-than-significant impacts on solid waste disposal services and facilities.
Compliance with Solid Waste Statutes and Regulations

Construction of the Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements would comply with federal, state, and local statutes and regulations related to solid waste. Thus, there would be no adverse impacts.

Operational Impacts

Exceed Wastewater Treatment Requirements

There would be no change in wastewater production, because the Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements would not add students or faculty. Therefore, the proposed 2009 Master Plan is not expected to exceed wastewater treatment requirements set for the Tillman Water Reclamation Plant.

Construction or Expansion of Water or Wastewater Treatment Facilities

No construction of water or wastewater facilities would be needed to serve the Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements. Some minor adjustments to water lines or fire hydrants may be made along Eldridge Avenue to accommodate streetscape improvements. No environmental impacts associated with construction of water (water lines and fire hydrants) or wastewater facilities are expected. Thus, there would be no operational impact.

Construction or Expansion of Storm Water Drainage Facilities

With implementation of the BMPs described above, the proposed 2009 Master Plan would not substantially alter the existing drainage pattern of the site in a manner which would: (1) result in substantial erosion or siltation, (2) substantially increase the rate or amount of runoff resulting in flooding or the creation of runoff exceeding the capacity of existing or planned stormwater drainage systems, or (3) provide substantial additional sources of pollutants. Therefore, impacts would be less than significant and no mitigation would be required.

Sufficient Water Supplies

As shown on Table 3.15-3, the estimated project water consumption is approximately 93,815 gpd. These future water demand estimates do not consider design features for improving water use efficiency such as orienting buildings in response to climatic conditions (i.e. wind direction, sun angles, and precipitation) or the incorporation of low-flow water features and drought-resistant landscaping. In addition, compliance with the LEED standards, as discussed in Chapter 2.0, Project Description, would reduce the water service demands of the proposed 2009 Master Plan.

Sufficient water would be made available from the Alta Vista Tanks to meet the water needs of the proposed 2009 Master Plan site. The Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements would increase governmental sector water consumption annually by approximately 95 af. Currently, there is an existing 24-inch steel LADWP water line running through the East Campus to service the existing community. Hence, water services are in place to serve the Main Campus, East Campus, Nursery Property, and Eldridge Avenue Streetscape Improvements.
With implementation of the project described above, the coordination of on- and off-site water line relocations with the appropriate state and local agencies, and City permits for construction within the street right-of-way, the projected increase in water consumption and associated delivery system improvements (water line connections and fire hydrants) to serve the proposed 2009 Master Plan would have a less-than-significant impact on water supply facilities.

### Table 3.15-3  Estimated LAMC Water Consumption

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Generation Factor</th>
<th>Unit Increase</th>
<th>Increase in Water Demand (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Campus</td>
<td>11 gpd/person</td>
<td>4,724 people</td>
<td>51,964</td>
</tr>
<tr>
<td>East Campus</td>
<td>150 gpd/1,000 square ft</td>
<td>195,490 sq. ft</td>
<td>29,324</td>
</tr>
<tr>
<td>Nursery Property (temporary)</td>
<td>150 gpd/1,000 square ft</td>
<td>5,760 sq. ft.</td>
<td>864</td>
</tr>
<tr>
<td>Nursery Property</td>
<td>150 gpd/1,000 square ft</td>
<td>20,000 sq. ft.</td>
<td>3,000</td>
</tr>
<tr>
<td>Athletic Fields (irrigation)</td>
<td>-</td>
<td>-</td>
<td>8,333</td>
</tr>
<tr>
<td>Athletic Fields Support Facilities</td>
<td>150 gpd/1,000 square ft</td>
<td>2,200 sq. ft.</td>
<td>330</td>
</tr>
<tr>
<td>Eldridge Avenue Improvements</td>
<td>-</td>
<td>-</td>
<td>-^</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>93,815</td>
</tr>
</tbody>
</table>

1 Average daily campus population for 2015 (8,066) minus existing average daily campus population (3,342).

2 Long-term use of Nursery Property for College Programs and Activities Center building.

3 PCR Services Corporation, 2005 Draft LAMC Master Plan and Public Recreation Improvement Program EIR.

4 “-” indicates negligible water demand.

#### Wastewater Treatment Capacity

As shown on Table 3.15-4, the estimated LAMC wastewater generation is approximately 40,041 gpd. The TWRP, which receives and treats wastewater flows from LAMC, has sufficient capacity (approximately 30 mgd) to accommodate the increase in flow resulting from the proposed 2009 Master Plan. Therefore, the proposed project is not expected to affect the wastewater treatment capacity of the TWRP. Thus, there would be less-than-significant impacts.

#### Landfill Capacity

Based on tonnage reports provided by LAMC, existing solid waste generation at LAMC is 1191 pounds per day [ppd] (approximately 434,715 pounds per year) and includes solid waste generation for all existing buildings, bungalows and current construction. According to LAMC, current waste generation is above standard waste generation because of several construction projects currently underway. Future solid waste generation is expected to be lower than current waste generation for all subsequent construction. Using current waste generation of 434,715 pounds per year, operation of the proposed 2009 Master Plan would not substantially affect solid waste disposal availability.
Table 3.15-4  Estimated Wastewater Consumption

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Generation Factor</th>
<th>Unit Increase</th>
<th>Increase in Wastewater Demand (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Campus</td>
<td>2.8 gpd/person</td>
<td>4,724 people</td>
<td>13,227</td>
</tr>
<tr>
<td>East Campus</td>
<td>120 gpd/1,000 square feet</td>
<td>195,490 sq. ft.</td>
<td>23,459</td>
</tr>
<tr>
<td>Nursery Property (temporary)</td>
<td>120gpd/1,000 square feet</td>
<td>5,760 sq. ft.</td>
<td>691</td>
</tr>
<tr>
<td>Nursery Property</td>
<td>120 gpd/1,000 square feet</td>
<td>20,000 sq. ft.</td>
<td>2,400</td>
</tr>
<tr>
<td>Athletic Fields Support</td>
<td>120 gpd/1,000 square feet</td>
<td>2,200 sq. ft.</td>
<td>264</td>
</tr>
<tr>
<td>Eldridge Avenue Improvements</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>40,041</td>
</tr>
</tbody>
</table>

Currently, unclassified landfills have a total remaining capacity of 37,500,000 cy, which is sufficient to accommodate waste disposal related to the proposed 2009 Master Plan. Furthermore, as of 2009, County Class III landfills had a remaining disposal capacity of 251,542,063 cy. Any solid waste generated by the proposed 2009 Master Plan would be adequately accommodated by unclassified landfills and County Class III landfills. Therefore, operation of the proposed 2009 Master Plan would result in less-than-significant impacts on solid waste disposal services and facilities.

**Compliance with Solid Waste Statutes and Regulations**

Operation of the proposed 2009 Master Plan would comply with all federal, state, and local statutes and regulations related to solid waste. Thus, there would be no adverse impacts resulting from the proposed 2009 Master Plan.

**Cumulative Impacts**

Using the list of related projects as indicated in Chapter 2.0, Project Description (Table 2-10), LADWP estimates that each household uses approximately 350 gpd. Using this measurement, 350 was multiplied by the number of homes/units proposed for the single family and multi-family development to ascertain the approximate number of expected gpd increase in water demand. The total cumulative projects of homes/units proposed would utilize approximately 479,850 gpd.

The proposed 2009 Master Plan would contribute an additional 93,815 gpd to the estimated water demand for an anticipated use of approximately 573,665 gpd. Residential uses constitute the largest LADWP customer class with approximately 60 percent of the water demand. Commercial (21%), industrial (4%), governmental (7%), and non-revenue water (such as unbilled fire protection water service, system flushing program) and other factors (8%) combined equal the water consumption within the LADWP service area. Combined, the cumulative projects would require approximately 642 af per year of water in 2015, or 0.0856 percent of the projected water use (approximately 749,900 af annually by the year 2015) within the LADWP service area.

The development permit and environmental review processes administered by local agencies further reduce the potential for significant cumulative impacts on water facilities and supplies by providing the LADWP, the City, and the project sponsor an opportunity to review and consider a project for potential conflict with urban water management plans. Taking into account these processes and the estimates of cumulative water demand of the proposed project and related projects within the
3.0 Setting, Environmental Impact Analysis, Mitigation Measures

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LADWP service area, and the LADWP water management plans (including conservation and recycling measures), existing water supply would be sufficient to meet the demand generated by the proposed project and related projects. As a result, cumulative impacts would be less than significant.

The estimated wastewater generation associated with the related projects located within the TWRP service area is 374,125 gpd. The proposed project would contribute an additional 40,041 gpd to this estimated generation for a total of 414,166 gpd. TWRP was designed to accommodate flows of up to 80 mgd and the regional wastewater facility, the Hyperion Treatment Plan, was designed to meet regional needs beyond 2010. Although there would be an expected cumulative increase in wastewater and demand on both of these facilities, impacts would be less than significant because flows are within the service capacity of the plants.

The related projects are expected to be developed in accordance with applicable codes, policies, and regulations pertaining to solid waste disposal. Based on available information regarding cumulative development, it is reasonable to assume that these projects would incorporate appropriate design standards or elements pertaining to on-site waste collection facilities, source reduction and recycling, conservation. Each of the related projects would be subject to the project and permit approval process, review for CEQA compliance, and may be subject to design review by the respective city. In addition, because the related projects may not use the same waste haulers as the proposed 2009 Master Plan, it is speculative to assume that solid waste generated by the related projects would impact the same landfill facilities as the proposed 2009 Master Plan.

Because disposal destination for solid waste depends largely on the private haulers (who maintain disposal agreements with landfill operators), the question of sufficient landfill capacity to serve the cumulative needs of the related projects, Sylmar area growth through 2010, and the proposed 2009 Master Plan is considered in a regional context. The 2010 forecasts for the Sylmar area estimate a growth in the number of households from 18,699 in 2000 to 20,890 in 2010; the change is 2,191 households. The estimated annual solid waste generation for 2191 households is 4266.3 tons. In this larger context, there would be sufficient landfill capacity to accommodate the potential waste stream from the small scale urban infill and redevelopment projects, the forecasted growth in the Sylmar area, and the proposed 2009 Master Plan, as indicated in the countywide solid waste projection for 2017, which is 166 million tons. The countywide projection takes into consideration population, housing, and employment projections for Los Angeles County, including the future solid waste disposal needs of the Sylmar community. The projected capacity of in-County landfills is 195.9 million tons. The future availability of the Mesquite Regional Landfill in Imperial County, currently underway and expected to be open for rail shipments of waste in 2009, would provide additional capacity prior to the opening year for the proposed 2009 Master Plan. When fully operational, this regional landfill would be able to accept 20,000 tons per day of waste with a total capacity of approximately 600 million tons and projected life of 100 years.

Considering the scale of the related projects and the proposed 2009 Master Plan and their anticipated solid waste stream; locally required participation in source reduction and recycling programs; state-mandated diversion of solid waste from landfill disposal rate of 50 percent; and the estimated capacity of existing in-County landfills and the future Mesquite Regional landfill in Imperial County, the cumulative impacts of the proposed 2009 Master Plan and the related projects would be less than significant.
3.0 Setting, Environmental Impact Analysis, Mitigation Measures

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3.15.4.3 Athletic Fields Impacts

Construction Impacts

*Exceed Wastewater Treatment Requirements*

The proposed Athletic Fields includes construction of new on- and off-site sewer lines as no wastewater infrastructure is currently provided to the proposed Athletic Fields site. TWRP, which receives and treats wastewater flows from the project site, is expected to comply with RWQCB wastewater treatment requirements. Because the maximum number of construction workers would be approximately 50, wastewater volumes from project construction would be minor. Therefore, construction of the proposed Athletic Fields would not impact TWRP operations.

*Construction or Expansion of Water or Wastewater Treatment Facilities*

The proposed 2009 Master Plan proposes to connect the Athletic Fields via a below grade lateral to the existing 10-inch main located in the center of Harding Street. The proposed Athletic Fields includes construction of new on- and off-site water lines for domestic use and landscape irrigation. Water service would be provided by installing one line serving both domestic and fire water needs, or two water lines with connection to the existing 24-inch low-pressure line located at the intersection of Harding Street and Eldridge Avenue. Fire flow requirements would be incorporated into the facility design, with water pressure and volumes defined in consultation with the County and City.

Sewer and water line construction would include demolition, trenching, pipeline installation, backfilling, and site restoration within a narrow corridor the length of the proposed water service line. The construction would take place without service interruption to existing water customers. With implementation of the project features described above, coordination of on- and off-site sewer and water line additions with the appropriate state and local agencies, City permits for construction within the street right-of-way, TWRP design capacity, and the nominal project-related increase, wastewater generation and associated conveyance system improvements (sewer line connections) to serve the proposed development of the Athletic Fields would have less-than-significant impacts on water and sewer facilities.

*Construction or Expansion of Storm Water Drainage Facilities*

No storm drain facilities would be constructed or affected; therefore, no impacts would occur.

*Sufficient Water Supplies*

Sufficient water would be made available from the Alta Vista Tanks to meet the water needs of the Athletic Fields site. Construction of the Athletic Fields would result in less-than-significant impacts on water supply.

*Wastewater Treatment Capacity*

The proposed Athletic Fields includes construction of new on- and off-site sewer lines as no wastewater infrastructure is currently provided. The Athletic Fields would be connected to the existing 10-inch main located in the center of Harding Street via a below grade lateral. Sewer line construction would include demolition, trenching, pipeline installation, backfilling, and site restoration within a narrow corridor the length of the proposed sewer service line. The construction
would take place without service interruption to existing customers. Impacts would be less than significant.

**Landfill Capacity**

The proposed Athletic Fields site is currently undeveloped. On-site vegetation would be ground for reuse as mulch within the site to the extent feasible, thereby reducing landscape waste generation during site clearing and grading. Construction-related waste would also be minimal during the building stage, as a nominal amount of structural building materials would be needed for the construction of the ancillary buildings. Also, unclassified landfills have a total remaining capacity of 37,500,000 cy, which is sufficient to accommodate the disposal of construction-related waste such as the small amounts of asphalt associated with improvements to the access road.

Considering the proposed Athletic Fields features, the anticipated minimal amounts of construction debris that would be generated by the currently undeveloped site, and the availability of landfill capacity, the proposed construction of the Athletic Fields would result in less-than-significant impacts on solid waste disposal services and facilities. No mitigation measures would be required.

**Compliance with Solid Waste Statutes and Regulations**

The proposed Athletic Fields would comply with all federal, state, and local statutes and regulations related to solid waste. Thus, there would be no adverse cumulative impacts resulting from the proposed project.

**Operational Impacts**

**Exceed Wastewater Treatment Requirements**

Development of the Athletic Fields would generate approximately 406 gpd of wastewater, a nominal amount. Because TWRP has sufficient capacity (30 mgd) to accommodate these new flows and would not negative affect TWRP wastewater treatment requirements, the Athletic Fields are not expected to negatively affect TWRP operations.

**Sufficient Water Supplies**

Development of the Athletic Fields and ancillary facilities would result in an increase in on-site water consumption of 8841 gpd (9.9 af annually). During fiscal year 2003-2004, irrigation water for public parks and golf courses, youth sports fields, community gardens, and commercial agriculture combined consumed 246 af, less than 0.0004 percent of the City’s total water consumption for this period. The increase in water consumption associated with the Athletic Fields is approximately 9.9 af, an amount too slight to be of consequence to LADWP water planning. Therefore, operation of the Athletic Fields would have less-than-significant impacts on water supply.

**Wastewater Treatment Capacity**

Development of the Athletic Fields would generate approximately 406 gpd of wastewater, a nominal amount. TWRP has sufficient capacity (30 mgd) to accommodate these new flows. Therefore, the proposed Athletic Fields are not expected to negatively affect TWRP operations.
Landfill Capacity

One solid waste bin with a capacity of up to 20 cy and separate receptacles for collection of recyclable materials would be provided on site to serve the waste disposal needs of the Athletic Fields. Operation of the Athletic Fields could generate up to 1040 cy of solid waste per year.

County Class III landfills would be able to accommodate the nominal increase in solid waste associated with the operation of the Athletic Fields. Furthermore, by providing separate receptacles for recyclable materials, and applying sustainable practices to landscape maintenance, the proposed Athletic Fields would contribute toward County programs for achieving compliance with state requirements for diversion of 50 percent of solid waste from landfill disposal.

Considering the proposed Athletic Fields features, the anticipated nominal amounts of solid waste that would be generated by operation of the proposed recreation facilities and the availability of landfill capacity, the proposed operation of the Athletic Fields would not result in less-than-significant impacts on solid waste disposal services and facilities.

Compliance with Solid Waste Statutes and Regulations

The proposed Athletic Fields complies with all federal, state, and local statutes and regulations related to solid waste. Thus, there are no adverse cumulative impacts resulting from the proposed project.

Cumulative Impacts

Cumulative impacts for the Athletic Fields portion of the proposed 2009 Master Plan would be similar to those discussed in Section 3.15.4.2, and would be less than significant.

3.15.5 Mitigation Measures for Significant Impacts

No mitigation measures are necessary.

3.15.6 Level of Significance after Mitigation

Impacts would be less than significant.