Division of Land / Environmental Review

City Hall • 200 N. Spring Street, Room 750 • Los Angeles, CA 90012

DRAFT ENVIRONMENTAL IMPACT REPORT

VOLUME I

Forest Lawn Memorial Park – Hollywood Hills Master Plan

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THIS DOCUMENT COMPRISES THE ENVIRONMENTAL DOCUMENTATION AS REQUIRED UNDER THE CALIFRONIA ENVIRONMENTAL QUALITY ACT.

Project Address: 6300 Forest Lawn Drive, Los Angeles, California

Project Description: Forest Lawn Memorial-Park Association, the Applicant, seeks approval to construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), and approximately 1,100,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria). In addition, the Project includes approximately 200,000 new interment sites within currently undeveloped areas of the Project Site. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. It is estimated that over a 15-year construction period, implementation of the proposed Project would require approximately 1,728,000 cubic yards of cut, approximately 1,015,000 cubic yards of fill, and a net export amount of approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt would be exported in connection with grave preparation through 2050. It is estimated that construction of the new structures would occur over an approximately 40-year period, from approximately 2011 to 2050. The sale of interment sites is also expected to occur over an extended period of time, beyond the year 2050.

APPLICANT:
Forest Lawn Memorial-Park Association

PREPARED BY:
Matrix Environmental

February 2011

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I. Introduction/Summary

A. Introduction/Overview of the CEQA Process

The purpose of this Draft Environmental Impact Report (EIR) is to inform decision-makers and the general public of the potential environmental impacts resulting from the proposed development of the Forest Lawn Master Plan (the "Project") located at the Forest Lawn Memorial-Park—Hollywood Hills property within the Hollywood Community Planning Area of the City of Los Angeles.

The proposed Project will require certain discretionary approvals by the City of Los Angeles and other governmental agencies. Therefore, the proposed project is subject to environmental review requirements under the California Environmental Quality Act (CEQA).[1] The City of Los Angeles (City) is the Lead Agency under CEQA for the proposed Project.

As described in Section 15121 (a) and 15362 of the State CEQA Guidelines, an EIR is an informational document which will inform public agency decision-makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.[2] The purpose of this Draft EIR, therefore, is to focus the discussion on those potential effects on the environment of the proposed Project which the Lead Agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce significant environmental impacts or avoid significant environmental impacts.

This Project-level Draft EIR was prepared in accordance with Section 15151 of the State CEQA Guidelines, which defines the standards for EIR adequacy:

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[1] *Public Resources Code Sections 21000-21177.*

[2] *California Code of Regulations Title 14, Chapter 3, Sections 15000-15387.*

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1. Notice of Preparation/Public Scoping Meeting

Comments from identified responsible and trustee agencies, as well as interested parties on the scope of the Draft EIR, were solicited through a Notice of Preparation (NOP) process. The NOP for the Draft EIR was circulated for a minimum 30-day review period starting on November 13, 2008 and ending on December 15, 2008. In addition, a public scoping meeting was held on November 19, 2008. The public scoping meeting provided the public with the opportunity to receive information regarding the Project and to provide input regarding issues to be addressed in the Draft EIR. A copy of the NOP and responses to the NOP are provided in Appendix A to this Draft EIR.

2. Areas of Controversy/Issues to be Resolved

Potential areas of controversy and issues to be resolved by the City's decision-makers often include those environmental issue areas where the potential for a significant unavoidable impact has been identified. As demonstrated by the analysis herein, with implementation of mitigation measures, the Project would not result in any significant impacts to the environment. Based on the NOP comment letters provided in Appendix A, issues known to be of concern in the community include biological resources, particularly with respect to Griffith Park, aesthetics, and potential cumulative impacts related to other proposed development in the vicinity of the Project Site. Refer to Appendix A for copies of the NOP comment letters.

3. Environmental Issues Analyzed in the Draft EIR

Based on preparation of an Initial Study (refer to Appendix A) and a review of environmental issues by the Planning Department, this Draft EIR analyzes the following environmental impact areas:

- Visual Resources (Visual Quality/Aesthetic Character, Views)
- Air Quality/Climate Change

- Biological Resources
- Cultural Resources
- Geologic Resources
- Hazardous Materials/Risk of Upset
- Hydrology/Water Quality
- Land Use and Planning
- Noise
- Traffic/Circulation
- Public Utilities (Wastewater, Water, Energy Conservation, Solid Waste)
- Public Services (Fire Protection)

Section V.C. General Impact Categories, of this Draft EIR lists the environmental issues that were determined by the Initial Study not to be significantly impacted by the proposed Project and, therefore, are not analyzed in detail herein. These issues include:

- Agriculture;
- Mineral Resources;
- Population & Housing;
- Public Services (Police, Schools, Recreation and Parks, and Libraries).

4. Environmental Review Process

This Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for 45 days. All comments or questions regarding the Draft EIR should be addressed to:

Adam Villani, Environmental Review Coordinator, EIR Unit
City of Los Angeles, Department of City Planning
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Adam.Villani@lacity.org (email)
(213) 978-1343 (fax)

Following public review of the Draft EIR, a Final EIR will be prepared in response to any written comments received during the public review period. The Final EIR will be available for public review prior to its certification by the decision-makers.

5. Organization of the Draft EIR

This Draft EIR is organized into seven sections, as follows:

Section I. Introduction/Summary: This section provides an introduction to the environmental review process per CEQA, a summary of the proposed Project description, areas of controversy, issues to be resolved, alternatives to the proposed Project, and environmental impacts and mitigation measures.

Section II. Project Description: This section provides a complete detailed description of the proposed Project including the Project location, objectives, characteristics, and required discretionary actions.

Section III. Environmental Setting: An overview of the study area's environmental setting is provided including a description of existing and surrounding land uses, and a list of related projects proposed in the project area.

Section IV. Environmental Impact Analysis: Sections IV.A through IV.I are the focus of this Draft EIR and include an analysis of the environmental topics set forth above. The analysis of each environmental issue contains a discussion of existing conditions for the project area, an assessment and discussion of the significance of impacts associated with the proposed Project, mitigation measures, cumulative impacts, and level of impact significance after mitigation.

Section V. General Impact Categories: This section provides a summary of any significant and unavoidable impacts that are anticipated to occur as a result of the proposed Project, as well as a discussion of the potential growth-inducing impacts of the proposed Project.

Section VI. Alternatives to the Proposed Project: As required by CEQA, this section includes an analysis of a reasonable range of alternatives to the proposed Project. The range of alternatives selected is based on their ability to feasibly attain most of the basic objectives of the Project and avoid or substantially lessen any of the significant effects of the Project.

Section VII. Preparers of the EIR and Persons Consulted, References and Acronyms: This section presents a list of City and other agencies and consultant team members that contributed to the preparation of the Draft EIR,

a list of written materials used in the preparation of this Draft EIR, and definitions for all of the acronyms and abbreviations used in this Draft EIR.

B. Proposed Project Summary

The Project is located at the base of the northeastern portion of the Santa Monica Mountains in the City of Los Angeles at the existing Forest Lawn Memorial-Park—Hollywood Hills property, located at 6300 Forest Lawn Drive, in the City of Los Angeles (Project Site). The existing Project Site comprises approximately 444 acres and is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn Memorial-Park Association on the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. The Project Site is buffered from residential and commercial uses, and many of the property's uses are not visible from off-site, due to the topography of this area.

The Project seeks approval to construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), and approximately 1,100,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria). In addition, the Project includes approximately 200,000 new interment sites within currently undeveloped areas of the Project site. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. The Project also includes the development and maintenance of debris basins within the Project Site and at the edge of the property boundary with Griffith Park. It is estimated that over a 15-year construction period, implementation of the proposed Project would require approximately 1,728,000 cubic yards of cut, approximately 1,015,000 cubic yards of fill, and a net export amount of approximately 713,000 cubic yard. In addition, up to 400,000 cubic yards of dirt will be exported in connection with grave preparation through 2050. Depending on when the entitlement process is completed, construction of the Project could commence in 2011 or 2012. For the purposes of the analyses provided in this Draft EIR, it is assumed that construction would begin in 2011. It is estimated that construction of the new structures would occur from approximately 2011 to 2050. The sale of interment sites is also expected to occur over an extended period of time, beyond the year 2050.

C. Alternatives to the Proposed Project

This Draft EIR considers a range of alternatives to the proposed Project to provide informed decision-making in accordance with Section 15126.6 of the State CEQA Guidelines. The alternatives analyzed in this Draft EIR include:

- Alternative 1: No Project
- Alternative 2: Reduced Project with Preservation of Drainages D and D1
- Alternative 3: Reduced Project with Preservation of Drainages D, D1, F, and F1
- Alternative 4: Reduced Project With Preservation of Drainages D, D1, F, F1, and H
- Alternative 5: No Federal Action; Preservation of Army Corps Jurisdictional Areas

A summary of each of these alternatives is provided below.

Alternative 1: No Project Alternative

Existing baseline conditions along with the ongoing operational activities at the Forest Lawn Memorial-Park—Hollywood Hills property, and the additional foreseeable development that could occur under existing entitlements, form the basis of the No Project Alternative. Under the No Project Alternative, further development of the Project Site could occur under the existing Conditional Use Permits that apply to most of the Project Site, and it is assumed that Forest Lawn would continue to build out small areas of the Memorial-Park incrementally and add on to existing wall crypts, columbaria, and garden areas as additional burial spaces are needed. However, the No Project Alternative would not include any development within potentially jurisdictional areas[3] of the Project Site that would require discretionary approvals from the California Department of Fish and Game or the Army Corps of Engineers. Thus, all of the potentially jurisdictional drainages on-site would remain in their current state under the No Project Alternative. In addition, restoration of Drainage L would not occur.

Alternative 2: Reduced Project with Preservation of Drainages D and D1

Alternative 2 would provide additional interment sites and cemetery-related facilities within the Project Site. Alternative 2 would result in approximately 108 acres of usable acreage and approximately 93 acres of developable acreage (as compared to

[3] *"Jurisdictional areas" as referred to in this analysis are the potential California Department of Fish and Game jurisdictional streambeds and potential Army Corps of Engineers jurisdictional waters within the Project Site.*

approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 2 would provide approximately 3,000 fewer built spaces than the proposed Project and approximately 3,000 fewer ground spaces. In addition, Alternative 2 would require approximately 1,740,000 cubic yards of cut, approximately 978,000 cubic yards of fill, and a net export amount of 762,000 cubic yards. This represents a reduction of 29,000 cubic yards of overall grading and an increase of 49,000 cubic yards of export when compared to the proposed Project. Similar to the proposed Project, Alternative 2 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory. Alternative 2 would also include approximately 1,072,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 28,000 square feet as compared to the proposed Project.

Under Alternative 2, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 2 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 2 would conserve two of the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 2 would preserve Sennett Creek (Drainage A), which is a highly complex riparian, shaded riverine system. Alternative 2 would also conserve the Drainage D riverine complex, which has a similar vegetative structure to Sennett Creek but is more isolated from human effects and prior uses. Under Alternative 2, the two other highest value stream segments would be largely eliminated, as with the proposed Project, though Alternative 2 would preserve the uppermost portion (approximately 25%) of Drainage F. Alternative 2 would also conserve other drainage segments, including F1, L6, L8, and M. Portions of Drainages F, I, J, J1, L, L4, and L5 would also be preserved. Similar to the proposed Project, Alternative 2 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

The majority of the grading under Alternative 2 would occur over an estimated 15-year construction period. In addition, this Alternative would also require soil to be exported in connection with grave preparation over the next 40 years, as with the proposed Project. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

Alternative 3: Reduced Project with Preservation of Drainages D, D1, F, and F1

Similar to the proposed Project, Alternative 3 would provide additional interment sites and cemetery-related facilities within the Project Site. Under Alternative 3, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 3 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 3 would conserve three of the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 3 would preserve Sennett Creek (Drainage A), a highly complex riparian, shaded riverine system. The Drainage D and Drainage F riverine complexes would also be largely conserved under Alternative 3. The Drainage D and Drainage F riverine complexes have vegetative structures similar to Sennett Creek, but more isolated from human effects and prior uses. Under Alternative 3, the other highest biological value stream segment, Drainage H, would largely be eliminated, as with the proposed Project. Alternative 3 would also conserve other drainage segments, including B, F1, L6, L8, and M. Portions of Drainages I, J, J1, L, L4, and L5 would also be preserved under Alternative 3. Similar to the proposed Project, Alternative 3 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

Alternative 3 would result in approximately 104 acres of usable acreage and approximately 90 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 3 would provide approximately 4,500 fewer built spaces than the proposed Project and approximately 5,500 fewer ground spaces. Alternative 3 would require approximately 1,675,000 cubic yards of cut, approximately 869,000 cubic yards of fill, and a net export amount of 806,000 cubic yards. These grading activities would represent a decrease of approximately 199,000 cubic yards of grading and an increase of approximately 93,000 cubic yards of export when compared to the proposed Project. Similar to the proposed Project, Alternative 3 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 3 would include approximately 1,029,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 71,000 square feet of non-occupied floor area as compared to the proposed Project. It is estimated that construction of the new structures would occur over an extended period from 2011 to 2050. In addition, this Alternative would require up to 400,000 cubic yards of soil to be exported in connection with grave preparation over this period, as with the proposed Project. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

Alternative 4: Reduced Project with Preservation of Drainages D, D1, F, F1, and H

Similar to the proposed Project, Alternative 4 would provide additional interment sites and cemetery-related facilities within the Project Site. Under Alternative 4, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 4 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 4 would conserve the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 4 would preserve Sennett Creek (Drainage A), which is a highly complex riparian, shaded riverine system. Alternative 4 would also conserve the Drainage D and Drainage F riverine complexes, which have similar vegetative structures to Sennett Creek but are more isolated from human effects and prior uses. In addition, Alternative 4 would preserve Drainage H, which is also biologically valuable due to its size and the diverse and relatively undisturbed biological resources it supports. Alternative 4 would also conserve other drainage segments, including Drainages B, F1, L6, L8, and M. In addition, portions of Drainages I, J, J1, L, L4, and L5 would also be preserved under Alternative 4. Similar to the proposed Project, Alternative 4 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

Alternative 4 would result in approximately 103 acres of usable acreage and approximately 89 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 4 would provide approximately 4,000 fewer built spaces than the proposed Project and approximately 7,000 fewer ground spaces. Similar to the proposed Project, Alternative 4 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 4 would include approximately 1,029,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 71,000 square feet as compared to the proposed Project. Alternative 4 would result in approximately 2.5 million cubic yards of grading, or a reduction of approximately 241,000 cubic yards of grading when compared with the proposed Project. Alternative 4 would require a net export during grading of approximately 868,000 cubic yards, which is an increase of approximately 155,000 cubic yards as compared to the proposed Project. It is estimated that construction of the new structures would occur from 2011 to 2050. In addition, this Alternative would also require up to 400,000 cubic yards of soil to be exported in connection with grave preparation over this period, as with the proposed Project. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

Alternative 5: No Federal Action; Preservation of Army Corps Jurisdictional Areas

Similar to the No Project Alternative, Alternative 5 would provide additional interment sites and cemetery-related facilities within the Project Site without impact to federal jurisdictional areas. Under Alternative 5, the proposed additions within the developed portion of the Project Site would be the same as under the No Project Alternative. The proposed development in the undeveloped portions of the Project Site under Alternative 5 would be altered and reduced to avoid all of the potentially federal jurisdictional drainages. All of the stream segments on-site except Drainage G would be preserved, regardless of their biological value. Alternative 5 would require approval from the City of Los Angeles and from the California Department of Fish and Game (with respect to 0.37 acre of impact within its potential jurisdiction); however, Alternative 5 would not require permits from the Army Corps of Engineers. Alternative 5 would not include a crossing of Sennett Creek for internal roadway purposes.

Alternative 5 would result in approximately 84 acres of usable acreage and approximately 73 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 5 would provide approximately 28,000 fewer built spaces than the proposed Project and approximately 22,000 fewer ground spaces. Alternative 5 would require approximately 1,192,000 cubic yards of cut, approximately 581,000 cubic yards of fill, and a net export amount of 611,000 cubic yards. Alternative 5 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 5 would also include approximately 768,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 332,000 square feet as compared to the proposed Project. Similar to the proposed Project, it is estimated that grading would occur over a 15-year construction period. Approximately 1.77 million cubic yards of earth would be graded, which would be a reduction of approximately 970,000 cubic yards as compared to the proposed Project. Alternative 5 would require net export during grading of approximately 611,000 cubic yards, which is a decrease of approximately 102,000 cubic yards as compared to the proposed Project. As with the proposed Project, it is estimated that construction of the new structures would occur from 2011 to 2050. In addition, this Alternative would require up to 400,000 cubic yards of soil to be exported in connection with grave preparation over this period, as with the proposed Project. The sale of interment sites is expected to occur beyond the year 2050.

Environmentally Superior Alternative

As discussed in Section VI., Alternatives, in accordance with the CEQA Guidelines requirement to identify an Environmentally Superior Alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that Alternative 4: Reduced Project with Preservation of Drainages D, D1, F, F1, and H would be the Environmentally Superior Alternative. This Alternative would reduce more of the Project impacts than any of the other remaining alternatives. However, as discussed in Section VI., Alternatives, this Alternative would only partially meet several of the project objectives.

D. Summary of Environmental Impacts and Mitigation Measures

Table I-1 on page I-12 provides a summary of the environmental impacts of the proposed Project. These impacts are summarized as follows:

A. Aesthetics, Views, Light/Glare, and Shading

a. Environmental Impacts

(1) Visual Character and Viewsheds

The existing visual character of the Project Site is defined by both its location within the backdrop of the Santa Monica Mountains, and the built environment of the Forest Lawn Memorial-Park - Hollywood Hills property, which is defined by cemetery-related landscaped open space areas, structures and buildings. Public views of the Project Site are available from the south, and east of the Project Site. In addition, limited intermittent public views of the Project Site are available from north of the Project Site, including Buena Vista Park, Forest Lawn Drive, Buena Vista Street as it approaches the Project Site, a segment of West Alameda Avenue, and the I-5 Freeway. From the south and east, large portions of the Project Site are visible from several vantage points within Griffith Park, including Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel.

(a) Northern Public Vantage Points

Although the proposed grading and construction would disturb some of the existing natural terrain within the Project Site, the proposed Project would incorporate several techniques and measures such that the proposed development would continue to complement the surrounding natural environment. Specifically, the proposed grading is proposed to be divided into three grading areas and three phases, such that not all areas proposed for grading would be disturbed at the same time. This proposed phasing would serve to minimize the potential visual impact upon surrounding areas. Additionally, all

Table I-1
Summary of Environmental Impacts of the Proposed Project

Environmental Issue	Project Impact
A. AESTHETICS, VIEWS, LIGHT/GLARE AND SHADING	
Visual Character and Viewsheds	Less Than Significant
Light and Glare	Less Than Significant
B. 1 AIR QUALITY	
Construction	
Mass Daily (Regional) Emissions	Less Than Significant
Local Emissions	Less Than Significant
Toxic Air Contaminants	Less Than Significant
Operation	
Mass Daily (Regional) Emissions	Less Than Significant
Local Emissions	Less Than Significant
Toxic Air Contaminants	Less Than Significant
B.2 GREENHOUSE GAS EMISSIONS	
GHG Emissions and Climate Change	Less Than Significant
C. BIOLOGICAL RESOURCES	
Vegetation Community Impacts	Less Than Significant with Mitigation
Regulatory Status Animal Species Impacts	Less Than Significant with Mitigation
Regulatory Status Plant Species Impacts	Less Than Significant with Mitigation
City of Los Angeles Protected Tree Impacts	Less Than Significant with Mitigation
Resource Agency Jurisdictional Impacts	Less Than Significant with Mitigation
Wildlife Movement	Less Than Significant
Griffith Park SEA	Less Than Significant
D. CULTURAL RESOURCES	
Historic Resources	Less Than Significant
Archaeological Resources	Less Than Significant with Mitigation
Paleontological Resources	Less Than Significant with Mitigation
E. GEOLOGY AND SOILS	
Geologic Hazards	Less Than Significant with Mitigation
Sedimentation and Erosion	Less Than Significant
Landform Alteration	Less Than Significant
F. HAZARDS AND HAZARDOUS MATERIALS	
Construction	Less Than Significant
Operation	Less Than Significant

Table I-1 (Continued)
Summary of Environmental Impacts of the Proposed Project

Environmental Issue	Project Impact
G. HYDROLOGY AND WATER QUALITY	
Construction	
NPDES General Construction Permit	Less Than Significant
General Dewatering Permit	Less Than Significant
Operation	
Hydrologic Volumes (Runoff)	Less Than Significant
Surface Water Quality	Less Than Significant
H. LAND USE	
Consistency with Land Use Policies and Regulations	Less Than Significant
Land Use Compatibility	Less Than Significant
I. NOISE	
Construction	Less Than Significant with Mitigation
Operation	Less Than Significant
Blasting	Less Than Significant
J. TRAFFIC, CIRCULATION, AND PARKING	
Construction	Less Than Significant
Operation	
Project Traffic Generation	Less Than Significant
Intersection Capacity	Less Than Significant
Street Segment Capacity	Less Than Significant
Freeway Capacity	Less Than Significant
Neighborhood Intrusion	Less Than Significant
Project Site Access	Less Than Significant
Parking	Less Than Significant
K. UTILITIES AND SERVICE SYSTEMS	
Wastewater	
Construction	Less Than Significant
Operation	Less Than Significant
Water	
Construction	Less Than Significant
Operation	Less Than Significant
Energy	
Construction	Less Than Significant
Electricity	Less Than Significant
Natural Gas	Less Than Significant

Table I-1 (Continued)
Summary of Environmental Impacts of the Proposed Project

Environmental Issue	Project Impact
Solid Waste	
Construction	Less Than Significant
Operation	Less Than Significant
L. PUBLIC SERVICES	
Fire Protection	
Facilities and Equipment	Less Than Significant
Fire Flows	Less Than Significant
Emergency Response	Less Than Significant
Wildland Fire Hazards	Less Than Significant
Emergency Access and LAFD Review	Less Than Significant

Source: Matrix Environmental, 2010.

grading would occur in accordance with the City of Los Angeles requirements, which would require gradients of 2:1 (horizontal to vertical) or flatter. By grading to this specification, all grading that occurs at the southern boundary of the Project Site would visually blend with the existing topography. Further, it is important to note that a portion of the Project's grading would take place on areas that are already in various stages of grading. As a result, the existing grading has resulted in unvegetated soils that are terraced and contain visible sediment erosion controls.

Construction of new cemetery related structures, buildings, and landscaped areas, (discussed in detail in Section II, Project Description) would occur over an extended period from (2011 to 2050), minimizing visual impacts associated with the alteration of existing natural open space areas. Further, in general, many of the existing and proposed ground elevations are obstructed from vantage points from the north by the area's topography and existing vegetation. No ridgelines would be removed or modified as part of the proposed Project's grading; new construction would be built into the hillside areas below ridgelines.

New construction would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within the Forest Lawn Memorial-Park – Hollywood Hills property. Further, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site. One of the Project's non-habitable structures, the proposed bell tower, would rise to a height of up to 90 feet, which is taller than existing and proposed on-site structures. While this feature would be taller than other proposed

features, it would require a relatively small footprint and would generally be on the same scale and mass as other existing and proposed structures. Further, the Bell Tower would not be tall enough to obstruct views of the Santa Monica Mountains from public or private vantage points to the north of the Project Site. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. Given the historical context of the Forest Lawn Memorial-Park - Hollywood Hills property, as well as the topography and the employment of the proposed design standards, the proposed structures would remain visually compatible with those uses. These factors, in conjunction with the simulations provided in Section IV.A., Aesthetics, demonstrate that no significant modification to existing public views or landforms would result from construction of the structures associated with the proposed Project.

From the terminus of Bob Hope Drive and at the southern boundary of Buena Vista Park, views of the proposed mausoleum in the West Area are partially interrupted by existing and proposed trees on the Project Site as well as those adjacent to Forest Lawn Drive. A large electrical transmission line tower and the Los Angeles River Flood Control Channel are prominent in the foreground. Views of the Project Site and proposed structures are limited primarily by the existing mature vegetation. Views of the Los Angeles River Flood Control Channel and the existing Administration/Mortuary/Flower Shop building are also prominent at this location, as well as mature trees on and adjacent to the Project Site. Views of proposed structures are limited primarily by distance and existing vegetation at this location.

From the corner of South Reese Place and West Valleyheart Drive, distant views are provided of the proposed structures within the Central and West Areas of the Project Site. Views of the Project Site and proposed structures from this location are limited primarily by distance, topography, and extensive existing vegetation, but also by the SR-134 Freeway in the foreground.

Forest Lawn Drive is a City-designated scenic parkway. A bikeway also parallels portions of this scenic highway. Most areas proposed to be graded and developed are not visible from Forest Lawn Drive, and those portions that would be visible incorporate cemetery related uses and structures that would be consistent with those present in the existing built environment, providing enhanced view opportunities within the public viewshed. The proposed Project includes development of cemetery-related structures which could reach up to 100 feet in height, and potentially be visible from Forest Lawn Drive. However, because of the limited viewshed that is currently available from Forest Lawn Drive in the vicinity of the Project Site, topographical changes associated with grading and development of the west, south and east development areas would be out of

view and not readily apparent to the passing motorist. Proposed structures would expand existing cemetery uses within the Project Site, adding to the existing aesthetic values of the Forest Lawn Memorial-Park - Hollywood Hills property through the use of consistent structural design, and landscape. As such, visual impacts upon a designated scenic parkway would be less than significant.

In summary, intermittent public vantages are available north of the Project Site (i.e., Buena Vista Park, Forest Lawn Drive, Buena Vista Street as it approaches the Project Site, a segment of West Alameda Avenue, the I-5 Freeway). The proposed Project would provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas (see Figure II-15, Future Landscape Plan). In addition, approximately 75 acres of previously disturbed areas of the Project Site would be included within the Project's proposed grading. Thus, the proposed development would improve the existing visual character of some portions of the property by replacing several areas that are in intermittent states of grading and contain very little vegetation with extensive landscaping, cemetery related features, structures and site improvements that would be uniform and consistent with the historical and existing land uses on the Forest Lawn Memorial-Park – Hollywood Hills property. Thus, impacts to visual character and viewsheds from vantage points north of the Project Site would be less than significant.

(b) Southern Public Vantage Points

Large portions of the Project Site are visible from public vantage points in Griffith Park south and southeast of the Project Site due to their elevated position above the Project Site. As a result, Project improvements, including construction activities, would be visible from these locations.

While the Project Site's ground elevation and the base of the Santa Monica Mountains are largely obstructed from the north, these features are visible from public vantage points within Griffith Park. However, as mentioned above, grading would take place in three general phases and would include areas that are already partially graded. As part of the proposed Project, all grading would occur in accordance with the City of Los Angeles requirements, which would require gradients of 2:1 (horizontal to vertical) or flatter. By grading to this specification, all grading that occurs at the southern end of the Project Site would blend in visually with existing topographical features. As a result, the proposed Project's final grading and development of these areas would result in more visually uniform contouring throughout the Project Site and would also improve the consistency of the visual character of the Project Site by introducing a final grading design that visually transitions the Project Site with the natural topography of the Project area.

Regarding views of the Project's proposed structures, new construction would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within the Forest Lawn Memorial-Park – Hollywood Hills property. Further, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site. One of the Project's structures, the proposed bell tower, would rise to a height of 100 feet, which is taller than existing and proposed on-site structures. However, from the higher elevation at which the Griffith Park vantage points are located, the difference in height would not be prominent from these vantage points. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. Given the historical context of the Forest Lawn Memorial-Park - Hollywood Hills property, as well as the topography and the employment of the proposed design standards, the proposed structures would remain visually compatible with those uses. The proposed Project would provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. As such, impacts to visual character and viewsheds from vantage points south of the Project Site would be less than significant.

(c) Private Vantage Points

Existing private views from Mount Sinai Memorial Park would be modified by the grading and subsequent construction of proposed improvements within the eastern portion of the Project Site, including garden developments, mausoleums, wall crypts/columbaria, and roadways. While the proposed Project would alter existing private views by replacing existing undeveloped areas with cemetery related uses and landscaping, the proposed development would be consistent with existing cemetery development, adding cemetery related structures and features within the existing Forest Lawn Memorial-Park property. Further, portions of the undeveloped area of the Project Site are already in varying stages of grading. Therefore, impacts to private views would be less than significant.

(2) Light and Glare

Light and glare would slightly increase as a result of the proposed Project; however the existing uses that emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. The proposed Project would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Furthermore, as there are no residential properties or other light sensitive uses immediately surrounding the Project Site,

the lighting plan would not create any adverse light or glare impacts on neighboring properties. Therefore, light and glare impacts would be less than significant. Lighting impacts upon wildlife are addressed in Section IV.C, Biological Resources, of this Draft EIR.

b. Cumulative Impacts

Cumulative aesthetic impacts could occur if other related projects in the vicinity of the Project Site would result in the degradation of the Project area's visual character or the introduction of substantial light or glare or shade and shadow in conjunction with the impacts of the proposed Project. Due to the topography of the Project Site, the open space nature of land uses in the adjacent hillside areas, and the relatively isolated views created by the open space hillsides to the south, no related projects have been identified within the proximate viewshed of the Project Site. As such, the proposed Project would not result in adverse light, glare, visual character, or viewshed impacts, that when combined with effects from other projects would be cumulatively considerable.

c. Mitigation Measures

Although impacts related to aesthetics are anticipated to be less than significant, the following mitigation measures are recommended to further reduce the proposed Project's less than significant impacts:

Mitigation Measure A-1 Prior to issuance of a building permit, the applicant shall prepare a Lighting Plan in coordination with and subject to the approval of the Department of City Planning to establish lighting standards and guidelines.

Mitigation Measure A-2 The exterior of the proposed building(s) shall be constructed of materials such as high-performance tinted non-reflective glass and/or pre-cast concrete, honed natural stone, or fabricated wall surfaces.

Mitigation Measure A-3 Natural features, such as prominent knolls or ridge lines, shall be preserved.

d. Level of Significance After Mitigation

The proposed Project's impacts to aesthetics, including visual character and viewsheds, light and glare, and shade and shadow would be less than significant.

B.1 Air Quality

a. Environmental Impacts

(1) Construction Impacts

(a) Mass Daily (Regional) Construction Impacts

Construction-related daily maximum regional construction emissions for Phases 1, 2, and 3 would not exceed the SCAQMD daily significance thresholds for VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Therefore, regional construction emissions resulting from the Proposed Project would be less than significant and no mitigation measures are required.

(b) Localized Construction Impacts

The Project would not exceed any SCAQMD Local Significance Thresholds during any phase of the proposed construction; therefore, impacts would be less than significant.

(c) Toxic Air Contaminants

A health risk assessment (HRA) was conducted for the 15-year duration that construction is expected to occur. Diesel particulate matter would be generated during this period from the combustion of diesel fuel from construction equipment and haul trucks from the Project Site. Off-road construction equipment was modeled within the Project Site while the haul trucks were modeled to the nearest highway or freeway (Ventura Freeway). The estimated chronic carcinogenic risk based on a fifteen-year exposure is 2 in a million chronic cancer risk with a hazard index of 0.0056. The SCAQMD threshold is 10 in a million for chronic cancer risk and a hazard index of 1 or greater. Thus, Project construction TACs would be less than significant.

(2) Operational Impacts

(a) Mass Daily (Regional) Emissions

Operational area source emissions would be generated by the consumption of natural gas for space and water heating devices, crematory use, the operation of landscape maintenance equipment, and the application of architectural coatings (paints). The Project is not expected to generate additional operational daily vehicle trips; therefore, motor vehicle emissions were not evaluated. Project estimated maximum mass daily (regional) operational emissions would not exceed any SCAQMD thresholds. Operational emissions, therefore, would be less than significant and mitigation measures would be required.

(b) Localized Emissions

Estimated maximum ambient concentrations for operation emissions for the Project would not exceed any SCAQMD Local Significance Thresholds; therefore, impacts would be less than significant.

(c) Toxic Air Contaminants

Project operational emissions could be generated by natural gas consumption for space and water heating, landscape maintenance equipment, consumer products, and architectural coatings. These types of operational emissions for a commercial use such as the Project do not have the potential for causing a significant health risk to sensitive receptors.

Operations will involve grave site development using haul trucks that will generate diesel particulate matter emissions. Only a relatively small number of haul truck trips are anticipated on any given day, making it very unlikely that the diesel particulate emissions could result in a significant health risk to sensitive receptors. Moreover, no incremental increase in the rate of grave site development is expected, so diesel particulate emissions would not increase over current baseline conditions. Therefore, operational emissions from haul trucks would be less than significant.

A crematory is proposed as a potential component of the Project, although operation of the crematory is only anticipated to occur, if at all, after completion of grading activities. Operational emissions from the crematory would be dependent on the specifications of the burners used for combustion as well as the processing rate. The operational emissions associated with the crematory would include toxic air contaminants which are regulated under SCAQMD Rule 1401. Therefore, any proposed crematory would be required to implement Toxic Best Available Control Technology (T-BACT) (e.g., afterburner) as part of pre-construction permit review for compliance with SCAQMD Rule 1401. Nevertheless, it is anticipated that the operation of the proposed crematory would be similar in size and scope to a crematory currently operated at the Forest Lawn facility in Glendale, California. Emissions associated with the Glendale facility have not led to an exceedence of air quality standards or significant health risks. Prior to operation, the proposed crematory would have to obtain an operating permit from SCAQMD. If necessary, the operating permit would include conditions that ensure health risk standards are not exceeded. In other words, the crematory will not be permitted to operate unless health risk impacts would be below SCAQMD's significance thresholds.

Toxic air contaminant emissions associated with Project operations would not cause health risks that exceed SCAQMD significance thresholds. As such, potential impacts would be less than significant.

b. Cumulative Impacts

With regard to cumulative air quality impacts, SCAQMD recommend that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project specific impacts. Impacts from construction activities would be less than significant. Therefore, construction emissions would be cumulatively less than significant. Similarly, the operational emissions associated with the Project would not exceed the recommended thresholds and would not be cumulatively significant.

c. Mitigation Measures

As analyzed in this section, construction and operation of the Project would not have the potential to result in significant air quality impacts, and as such mitigation measures are not required.

d. Level of Significance After Mitigation

As summarized above, construction and operation of the Project would result in less than significant air quality impacts. Therefore, no mitigation measures are required.

B.2 Greenhouse Gas Emissions

a. Environmental Impacts

(1) Global Climate Change

Potential risks associated with climate change are associated with increasing concentrations of atmospheric GHG levels over time. Atmospheric concentrations of GHG are predicted to increase because of growing emissions from innumerable sources worldwide.[4] The relatively negligible GHG emissions associated with any individual source, as compared to global GHG emissions, are unlikely to have any quantifiable impact, let alone a significant impact, on atmospheric GHG concentrations. It would also be speculative to attempt to identify specific climate-related impacts resulting from the emissions of a single source or project. Accordingly, the significance of an individual project's contribution to global atmospheric GHG levels is best evaluated in the context of

[4] *See, e.g., Environmental Protection Agency, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009) ("cumulative emissions are responsible for the cumulative change in the stock of concentrations in the atmosphere"); see also 74 Fed. Reg. 66496, 66538 (same in Final Endangerment Finding).*

other cumulative emissions.[5] Thus, the significance of the Project's contribution to rising atmospheric GHG concentrations is evaluated in the cumulative impacts analysis.

At the Project level, the GHG CEQA Guidelines call for an analysis of whether the Project will expose sensitive receptors to potentially hazardous conditions.[6] The Project would not involve the siting of any sensitive developments, such as a residence, hospital or school. The Project involves expanding existing cemetery uses, which would not result in any significant exposure risks to hazardous conditions.

b. Cumulative Impacts

The Project's annual operational GHG emissions are expected to be 1,609 $MTCO_{2e}$/year. It is unclear, however, whether these emissions represent an increase over the environmental baseline. Although the Project's gross GHG emissions have been quantified, it is possible that the Project would not result in a net increase of GHG emissions if the Project displaces existing GHG emissions associated with other cemetery uses. The Project reflects a market demand for interment space. Given the Project's central location and proximity to a major freeway, it is possible that the Project would displace the use of cemeteries located in more remote areas, thus reducing the GHG emissions associated with the greater vehicle travel. Nonetheless, given the difficulty in quantifying whether the Project would result in a "net" increase or decrease in emissions, this analysis conservatively assumes that all construction and operational Project GHG emissions represent an increase over the environmental baseline. An increase in GHG emissions does not trigger an automatic determination of significance.[7]

The Project's operational emissions are relatively minor for a commercial project. According to the SCAQMD Draft GHG Guidance Document,[8] commercial projects emitting less than 3,000 $MTCO_{2e}$/yr are less than significant.[9] The Project would emit

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[5] *See ibid.*

[6] *GHG CEQA Guidelines § 15126.2.*

[7] *See also CEQA Guidelines § 15064(h)(4): "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."*

[8] *SCAQMD, "Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold," p. 3 10, October 2008, available at: http://www.aqmd.gov/ceqa/handbook/GHG/2008/oct22mtg/oct22.html (last visited January 20, 2010).*

[9] *The SCAQMD Draft GHG Guidance Document also states that a commercial project below the 3,000 $MTCO_{2e}$/yr threshold must meet certain unspecified GHG reduction standards. The Project Design Features substantially reduce the Project's GHG emissions below legal and regulatory requirements.*

approximately half this threshold (1,609 $MTCO_{2e}$/yr, or 54 percent of threshold). Although the draft SCAQMD Staff GHG thresholds have not been finalized, the Project's low operational GHG emissions are relevant to the overall significance determination.

The Project implements Project Design Features that reduce GHG emissions 33 percent below legal and regulatory standards. Moreover, numerous governmental policies and programs will indirectly reduce actual Project's GHG emissions even further then presented in this analysis The Project is a centrally located development meeting existing and expected demand, which supports GHG reduction goals of reducing vehicle miles traveled by encouraging infill development. The Project results in relatively minimal GHG emissions for a commercial project. The Project is consistent with AB 32, the CARB Scoping Plan, the SCAQMD Draft GHG Guidance Document, the Attorney General Fact Sheet, the 2006 Climate Action Team Report, and the Green LA Plan. Accordingly, the Project's GHG emissions represent a less than significant impact on the environment and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

c. Mitigation Measures

Construction and operation of the Project would not have the potential to result in significant GHG and Climate Change impacts, and as such mitigation measures are not required.

d. Level of Significance After Mitigation

As discussed above, no mitigation measures are required and impacts would be less than significant.

C. Biological Resources

a. Environmental Impacts

(1) Potential Vegetation Community Impacts

Approximately 70.42 acres of the approximately 120 acres of natural vegetation communities on the Project Site would be impacted with implementation of the proposed Project. Organisms with at least a moderate potential to occur may be present in these habitats. Each of the 15 natural plant communities on the Project Site would be affected to some extent by the proposed Project. Six of the 15 vegetation communities are locally designated regulatory status communities (or their functional equivalents), and the effects to those communities are described below.

Of the approximately 120 acres of native vegetation communities present on the Project Site, approximately 18.02 acres of vegetation communities locally designated as a Highest Inventory Community by the City of Los Angeles CEQA Thresholds Guide and/or identified as a CDFG Special Community (or the functional equivalent thereof) would be permanently impacted by the implementation of the proposed Project, including approximately 9.27 acres of western sycamore/coast live oak, approximately 7.64 acres of coast live oak woodland, approximately 0.62 acre of California walnut woodland, approximately 0.39 acre of southern willow scrub/mulefat scrub, approximately 0.05 acre of southern willow scrub, and approximately 0.05 acre of western sycamore/willow riparian forest. The loss of these regulatory status vegetation communities would be considered potentially significant prior to mitigation. Implementation of the proposed mitigation program would reduce the impact to these regulatory status vegetation communities to a less than significant level.

With respect to vegetation communities that are not considered regulatory status, the proposed Project would impact the following: approximately 21.81 acres of Venturan coastal sage scrub, approximately 18.05 acres of undifferentiated chaparral scrub, approximately 4.31 acres of disturbed Venturan coastal sage scrub, approximately 3.21 acres of coastal sage chaparral scrub, approximately 1.92 acres of mulefat scrub, approximately 1.9 acre of non-native grassland, approximately 0.73 acre of coyote brush scrub, approximately 0.3 acre of disturbed mulefat scrub, and approximately 0.17 acre of poison oak scrub. The loss of these non-regulatory status vegetation communities would be a less than significant impact.

(2) Regulatory Status Animal Species Impacts

To the extent animal species utilize the 70.42 acres of habitat that could be removed with Project implementation, these animals would have the potential to be impacted either directly or indirectly. Direct impacts to animal species could occur through incidental death during tree and brush removal operations. Indirect impacts would be expected to occur with Project implementation through habitat loss and associated stresses related to adjacent habitat carrying capacity negatively affected via competition by displaced organisms. As adjacent habitats adjust to influx from displaced individuals, effects range from minor and temporary to direct loss of some organisms which are out-competed for resources.

The species and/or subspecies described in Section IV.C., Biological Resources and summarized herein are regulatory status species that have been confirmed present or have

a moderate or high possibility of occurring on the Project Site.[10] Approximately 70.42 acres of the remaining approximately 120 acres of natural habitat for animals on the Project Site would be removed with implementation of the proposed Project. The following impacts to regulatory status faunal resources have been identified based on the physical limits of the proposed Project, the confirmed presence of animals, and the presumed presence of animals not detected but determined to have a moderate or high probability of occurring on the Project Site.

(a) Regulatory Status Reptile Species

Three regulatory status reptile species – California mountain kingsnake, coast horned lizard, and coast patchnose snake – have a moderate or high potential to occur on the Project Site, and one regulatory status reptile species – California legless lizard – is confirmed present on the Project Site. The proposed Project could remove up to 68.5 acres of habitat that is potentially occupied by the California mountain kingsnake, California legless lizard and coast patchnose snake, and up to 48.3 acres of habitat that is potentially occupied by coast horned lizard. This potential impact to up to four regulatory status reptile species could be considered potentially significant prior to mitigation. However, the mitigation measures provided below would reduce these impacts to less than significant levels.

(b) Regulatory Status Bird Species

Two regulatory status bird species – Cooper's hawk and yellow warbler – are confirmed present for nesting on the Project Site; another regulatory status bird species, Southern California rufous-crowned sparrow, is confirmed present. The proposed Project could remove up to 17.6 acres of habitat potentially occupied by Cooper's hawk, up to 11.7 acres of habitat potentially occupied by yellow warbler, and up to 29.3 acres of habitat potentially occupied by Southern California rufous-crowned sparrow. This potential impact to up to three regulatory status bird species would be potentially significant prior to

[10] *Species designated as Special Animals that are confirmed present or are potentially present on the Project Site are provided in Appendix E to the General Biological Assessment, attached as Appendix C-1 to this Draft EIR. Neither CEQA nor the City of Los Angeles CEQA Thresholds Guide requires an assessment of impacts to Special Animals; accordingly, any potential impacts to these species would be less than significant. Nevertheless, 70.42 of the acres potentially impacted by the proposed Project could potentially be occupied with at least one, and up to 11, species of CDFG-designated Special Animals. Any potential impacts to Special Animals would be reduced with the implementation of the mitigation measures below. These species include: monarch butterfly (Danaus plexippus), coastal whiptail (Aspidoscelis tigris stejnegeri), San Bernardino ringneck snake (Diadophis punctatus modestus), oak titmouse, lark sparrow (Chondestes grammacus), Nuttall's woodpecker (Picoides nuttallii), Allen's hummingbird (Selasphorus sasin), chipping sparrow (Spizella passerina), hoary bat (Lasiurus cinereus), small-footed myotis (Myotis ciliolabrum), and Yuma myotis (Myotis yumanensis).*

mitigation. In addition, Project construction would temporarily reduce available nesting habitat for birds in the area. However, implementation of the proposed mitigation measures provided below would reduce the impacts to these three regulatory status bird species to a less than significant level.

(c) Regulatory Status Small Mammal Species

One regulatory status small mammal species, San Diego desert woodrat, has been confirmed present on the Project Site, and the ringtail has a moderate likelihood of occurrence. The proposed Project could remove up to 48.3 acres of habitat that is potentially occupied by San Diego desert woodrat, and up to 68.5 acres of habitat that is potentially occupied by ringtail. This potential impact to up to two regulatory status small mammal species could be considered potentially significant prior to mitigation. However, implementation of the proposed mitigation measures below would reduce the impacts to these two regulatory status small mammal species to a less than significant level.

(d) Regulatory Status Bat Species

One regulatory status bat species, western red bat, has a high likelihood of occurrence on the Project Site, and three regulatory status bat species – pallid bat, spotted bat, and western mastiff bat – have a moderate likelihood of occurrence. The proposed Project could remove up to 17.6 acres of habitat that is potentially occupied by western red bat, pallid bat, and western mastiff bat, and up to 17 acres of habitat that is potentially occupied by spotted bat. This potential impact to up to four regulatory status bat species could be considered potentially significant prior to mitigation. However, implementation of the proposed mitigation measures below would reduce the impacts to these two regulatory status small mammal species to a less than significant level.

(3) Regulatory Status Plant Species Impacts

Three regulatory status plant species or subspecies (Catalina mariposa lily, ocellated Humboldt lily, and Southern California black walnut) are confirmed present on the Project Site. Implementation of the proposed Project would result in the removal of approximately 65 individual Catalina mariposa lilies, seven individual ocellated Humboldt lilies, and 144 Southern California black walnut trees. Under the City of Los Angeles CEQA Thresholds Guide significance threshold, the potential impacts to these three plant species would be considered significant prior to mitigation. However, implementation of the mitigation measures provided below would reduce all impacts to regulatory status plant species to a less than significant level.

Coulter's matilija poppy, which was detected on the Project Site, is considered to be the result of its use as a cultivar. Coulter's matilija poppy does not occur in the Santa Monica Mountains naturally. Although the entire stand of approximately 15–30 shoots

would be impacted by Project implementation, this impact would not be significant, given that it is a cultivar. Accordingly, no mitigation is required.

(4) City of Los Angeles Protected Tree Impacts

The proposed Project has the potential to remove 835 protected trees on the Project Site, specifically 632 coast live oak trees, 59 western sycamore trees, and 144 Southern California black walnut trees. Of the 632 coast live oaks proposed for removal, 440 are located within CDFG jurisdictional areas and 192 are located within upland areas. All 59 western sycamore trees proposed for removal are located within CDFG jurisdictional areas. Of the 144 Southern California black walnut trees proposed for removal, 63 are located within CDFG jurisdictional areas and 81 are located within upland areas. The permanent loss of these trees is a potentially significant impact prior to mitigation. However, implementation of the mitigation measures provided below would reduce impacts to less than significant levels.

(5) Resource Agency Jurisdictional Impacts

(a) Army Corps of Engineers "Waters of the U.S."

The proposed Project has the potential to permanently impact 2.37 acres of "waters" on the Project Site, consisting of 1.73 acres of non-wetland "waters" and 0.64 acre of wetland "waters." These potential impacts would be considered significant prior to mitigation. Most of the impacts that would occur in connection with Project implementation would be associated with tributary drainages to Sennett Creek and Drainage L. Though Sennett Creek would be largely left intact, the proposed Project includes a culvert crossing in Sennett Creek similar in design to existing crossings. Approximately 0.05 acre of Corps jurisdictional "waters" (a subset of the 2.37 acre total) would be impacted by the proposed culvert crossing. Implementation of the proposed mitigation program below would reduce the impacts to "waters" to a less than significant level. A copy of the Application for Department of the Army Permit for the Project submitted to the Army Corps of Engineers in November 2010 is attached within Appendix C to this Draft EIR.

(b) California Department of Fish and Game "Streambeds"

The proposed Project has the potential to permanently impact 7.94 acres of CDFG "streambeds." The permanent loss of 7.94 acres of "streambeds" would be a potentially significant impact prior to mitigation. Most of the impacts that would occur in connection with Project implementation would be associated with tributary drainages to Sennett Creek and Drainage L. Though Sennett Creek would be largely left intact, as noted above, the proposed Project includes a culvert crossing in Sennett Creek similar in design to existing crossings. Approximately 0.33 acre of CDFG jurisdictional "streambeds" (a subset of the 7.94-acre total) would be impacted by the proposed culvert crossing. Implementation of

the proposed mitigation program below would reduce the impacts to streambeds to a less than significant level. A copy of the Notification of Streambed Alteration for the Project submitted to the California Department of Fish and Game in November 2010 is attached within Appendix C to this Draft EIR.

(6) Wildlife Movement

The functional natural habitat within the Project Site is at the edge of the "island" of natural habitat area in the Santa Monica Mountains that includes Griffith Park. As such, the 70.42 acres of natural areas on the Project Site that would be impacted by the proposed Project do not function as a "macro-corridor"; rather, they are a relatively small piece (approximately 1.9 percent) of the approximate 3,600 acre "island" of remnant natural habitat in the easternmost Santa Monica Mountains. A review of current aerial photography and knowledge of this area generally suggests that this "island" of relatively natural habitat is, in itself, largely isolated. It has no connective habitat to natural areas west of the Hollywood Freeway. No discernable corridors or critical pathways for terrestrial wildlife have been identified. However, many birds permanently resident to the area would be capable of flying across the Cahuenga Pass.

Sennett Creek and its tributaries likely function as movement pathways (or micro-corridors) for organisms in search of water or other stream-related resources on a daily, periodic or seasonal basis. When water is not present in higher elevation areas, animals dependent on surface water may move farther downstream and into the Project Site to drink. Stream-associated avian species, like yellow warbler or Pacific-slope flycatcher, and amphibians also inhabit and move along Sennett Creek and its tributaries. These stream-associated organisms are directly dependent on the riparian habitat which is found along these tributaries.

The proposed Project would directly eliminate approximately 58.4 acres of upland habitat on the Project Site that is likely used for animal movement (e.g., chaparral, sage scrub, coastal sage chaparral scrub, non-native grassland, coyote brush scrub, poison oak, coast live oak woodland, and California walnut woodland), but conversion of those areas to memorial-park (and associated structures and infrastructure) would not eliminate the potential for upland species in the larger habitat complex to move across the north face of the Santa Monica Mountains. Substantial areas are present on both the north and south face of the Santa Monica Mountains to allow mobile organisms to move as necessary for their survival. The relatively small area affected by the Project supports a proportionally small amount of wildlife movement. Thus, barriers or impediments to movement in this small area would not preclude or eliminate animal movement on the north slope of the Santa Monica Mountains/Hollywood Hills. It is unlikely that the proposed Project, which is at the edge of the Hollywood Hills/Griffith Park habitat complex, would create a barrier to

animal movement in upland areas. This impact to upland habitat with respect to animal movement is not expected to be significant.

The proposed Project would impact approximately 12 acres of riparian-associated habitats (e.g., western sycamore/coast live oak, western sycamore/willow riparian forest, southern willow scrub, mulefat scrub, southern willow scrub/mulefat scrub, and disturbed mulefat scrub) on the Project Site. Most of the Sennett Creek tributaries which would be affected by Project development do not contain surface water during summer months, although the lower reaches of Sennett Creek appear to support surface water each year. During summer months when water is scarce and found mostly in lower elevation areas, the preservation of Sennett Creek should provide adequate water resources. Though approximately 12 acres of riparian-associated habitat would be removed and animal movement through Drainages B, C, D, D1, D2, E, F, H, I, J, and M on the Project Site would be impeded with implementation of the proposed Project, the proposed Project would not create a substantial barrier to animal movement given the small area of the larger habitat complex that would be affected. Furthermore, the existing impaired connectivity to the Los Angeles River via Sennett Creek and its tributaries, which provide habitat and cover but no longer have direct ecological connection with the Los Angeles River, as discussed above, would remain in place. Implementation of the proposed mitigation measures below would be expected to further reduce impacts, resulting in an overall impact with respect to animal movement that would not be significant.

(7) Griffith Park SEA

The Griffith Park SEA includes approximately 40 to 45 acres of the Project Site, in the southwestern portion of the Project Site where gravel extraction activities previously occurred. Most of the Project Site, including the developed cemetery, is not within the Griffith Park SEA.[11] However, the proposed Project has the potential to indirectly impact the adjacent Griffith Park SEA. Potential indirect impacts include construction noise and vibration, operational noise and vibration of operational aspects of the proposed Project, incidental unintended loss of mobile animals due to memorial park maintenance operations (i.e., mowing, maintenance activities, etc.), competition stress related to influx of displaced animals, and snake and rodent removals from public activity areas if/when these higher mobility organisms move onto developed portions of the Project Site. Consistent with the current cemetery use, the Project would include low levels of evening light. These impacts are not considered to be significant prior to mitigation because they would largely be temporary in nature and would affect only a small portion of the Griffith Park SEA; however,

[11] *Due to the generality of SEA mapping techniques and the scale at which the SEA boundary is depicted, it is difficult to determine the precise boundary of the SEA.*

implementation of the mitigation measures provided below would further reduce potential impacts.

A direct impact would occur to the small portion of the Griffith Park SEA which is on the Project Site. This area overlies the former gravel extraction area on the southwest edge of the Project Site, within the cemetery property. This area is comprised of undifferentiated chaparral scrub, Venturan coastal sage scrub, disturbed Venturan coastal sage scrub, coastal sage chaparral scrub, mulefat scrub and southern willow scrub plant communities and disturbed areas. These vegetation communities were established as interim plant covers following cessation of gravel extraction activities and are included in the acreage calculations of vegetation communities on the Project Site. A precise acreage calculation of the affected area is not possible given the generality of SEA mapping techniques and the scale at which the SEA boundary is drawn. The direct impact to the SEA is relatively small, and most of the affected habitat is comprised of previously-disturbed areas. Native soil substrates are disturbed and underdeveloped, and vegetative cover is sparse in most of the SEA area that would be affected by the Project. Therefore, the Project's impact to the Griffith Park SEA is not considered significant. Nonetheless, mitigation measures are provided below that would further reduce impacts related to the loss of animals and plants located within the small portion of the Griffith Park SEA on the Project Site.

In order to address possible catastrophic flooding, and in response to flooding at the west edge of the Project Site that occurred in late 2007/early 2008 (subsequent to the Griffith Park/Cahuenga Peak/Oakwood fire of March 2007), the Project includes the construction of several detention basins upstream of the proposed Project. These basins can, for the most part, be constructed on the Project Site. In three instances, however, the basins would extend beyond the property line into Griffith Park. This situation occurs because of topographic constraints, the requisite size of the basins, and other engineering considerations. The affected areas are all within land previously dedicated to the City of Los Angeles by Forest Lawn. At the time the property was conveyed, Forest Lawn included provisions for the construction of detention basins, as necessary, on the dedicated property. The total area on Griffith Park that would be affected from construction of the three basins is 0.79 acre.

Direct impacts to the Griffith Park SEA would occur as a result of the construction of the three off-site basins (or portions thereof). The construction of the three off-site basins would result in the loss of 0.22 acre of potentially jurisdictional "waters of the U.S.," 0.28 acre of potentially jurisdictional "streambeds," 18 protected trees (including 14 coast live oak and four [4] southern California black walnut), 19 Humboldt lily plants, and 0.59 acre of habitat/vegetation communities (including 0.08 acre of Venturan coastal sage scrub, 0.32 acre of undifferentiated chaparral scrub, 0.04 acre of non-native grassland, 0.06 acre of coast live oak woodland, 0.02 acre of California walnut woodland, and 0.07 acre of coast

live oak woodland/California walnut woodland) within Griffith Park. These acreages are not additive (i.e., the 0.22 acre of "waters of the U.S." is a subset of the 0.28 acre of "streambeds," and both are a subset of the 0.59 acre of habitat/vegetation communities). These impacts would occur on portions of the Griffith Park property that were previously dedicated to the City by Forest Lawn with the right to construct detention basins. These impacts to the Griffith Park SEA are not considered significant. Nonetheless, mitigation measures are provided below that would further reduce impacts within the Griffith Park SEA.

b. Cumulative Impacts

Cumulative impacts are impacts to biological resources that are a consequence of aggregate past, present, and foreseeable impacts of the proposed Project and other projects located within the vicinity of the Project Site. To evaluate cumulative impacts, the proposed Project and related projects identified in Section III, Environmental Setting, were analyzed.

Although Griffith Park and other undeveloped lands are directly south, east and west of the Project Site, the other surrounding areas are highly urbanized and would be rarely used by wildlife other than those adapted to urban environments. The functional natural habitat within the Project Site is at the edge of the Hollywood Hills/Griffith Park habitat complex, and the 70.42 acres of natural areas on the Project Site that would be impacted by the proposed Project comprise just 1.9 percent of the approximate 3,600 acre “island” of remnant natural habitat in the easternmost Santa Monica Mountains. Thus, the Project Site does not function as a “macro-corridor” for biological resources. This “island” of relatively natural habitat is, in itself, largely isolated, lacking any connective habitat to natural areas west of the Hollywood Freeway. Nor have corridors or critical pathways for terrestrial wildlife been identified. While birds and highly mobile animals may be able to traverse the Cahuenga Pass, the Project Site is not considered to be a major wildlife movement corridor, especially given the highly urbanized condition of its surroundings.

As discussed below, the proposed Project would not have a significant impact on biological resources (including vegetation communities, regulatory status animal or plant species, protected trees, or jurisdictional features) with implementation of the proposed mitigation program. Any impacts to biological resources similar to those impacted by the proposed Project as a result of the related projects would likely be subject to mitigation, resulting in less than significant impacts for those related projects as well.

Although the proposed Project would remove a small amount of available nesting habitat for birds, this is unlikely to result in a cumulative impact. Much of the remaining undeveloped nesting habitat in Southern California remains publicly owned, and, therefore, is likely to remain intact. Nor will foreseeable related projects remove substantial amounts

of nesting habitat, as they primarily exist in highly urbanized areas that are largely unsuitable for nesting, or are substantially small to have a minor impact on nesting habitat. In addition, related projects would also be subject to compliance with the Migratory Bird Treaty Act and mitigation requirements with respect to nesting birds, as applicable.

Thus, when considered in conjunction with related projects, the proposed Project is unlikely to result in cumulative impacts to biological resources, especially after implementation of the proposed mitigation measures.

c. Mitigation Measures

Mitigation Measure C-1 Forest Lawn shall conserve 28 acres of natural habitat areas on the Project Site in substantial conformance with the On-Site Mitigation Areas identified in Section IV.C Biological Resources of this Draft EIR. Forest Lawn shall record a covenant and agreement not to develop or bury within the conserved area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the conserved area as provided for in Mitigation Measure C-6.

Mitigation Measure C-2 Forest Lawn shall create, plant, and conserve 23 acres of graded slopes on the Project Site in substantial conformance with the On-Site Mitigation Areas and plant this area with native plant communities such as woodland, chaparral, and scrub in accordance with an upland habitat plan prepared by a qualified biologist/restoration ecologist. This area may include appropriate buffers of native vegetation adjacent to developed cemetery property that may be maintained for fire safety and aesthetic purposes. Forest Lawn shall record a covenant and agreement not to develop or bury within the graded slopes in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the graded slopes as provided for in Mitigation Measure C-6.

Mitigation Measure C-3 Forest Lawn shall create 8 acres of graded slopes on-site and plant the graded slopes with coast live oak and/or Southern California black walnut trees in accordance with a plan prepared by a qualified biologist/restoration ecologist. Such trees may be replacement trees in satisfaction of the proposed Project's tree mitigation requirements. Forest Lawn shall record a covenant and agreement not to develop or bury within the graded slopes in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the graded slopes as provided for in Mitigation Measure C-6.

Mitigation Measure C-4 Forest Lawn shall create, plant, and conserve a 1-acre riparian habitat within the on-site Drainage L area in substantial conformance with the On-Site Mitigation Areas. Western sycamore shall be used as a dominant element for planting within this mitigation area. The riparian habitat plan shall be prepared by a qualified biologist/restoration ecologist. Forest Lawn shall record a covenant and agreement not to develop or bury within this area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the created area as provided for in Mitigation Measure C-6.

Mitigation Measure C-5 Forest Lawn shall restore and conserve 1 acre of riparian habitat in the area adjacent to Sennett Creek in substantial conformance with the On-Site Mitigation Areas. Western sycamore shall be used as a dominant element for planting within this mitigation area. The riparian habitat plan shall be prepared by a qualified biologist/restoration ecologist. Forest Lawn shall record a covenant and agreement not to develop or bury within this area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for this area as provided for in Mitigation Measure C-6.

Mitigation Measure C-6 Forest Lawn shall implement a 5-year habitat improvement and monitoring program for the conserved acreage on the Project Site described in Mitigation Measures C-1 through C-5, which may include, but not be limited to, the following components within designated areas, as applicable, in accordance with a plan prepared by a qualified biologist/restoration ecologist:

a. Removal of non-native shrubs, trees and other invasive exotics such as *Arundo, Brassica* and *Cirsium* within conserved areas during the monitoring period by a qualified biologist/restoration ecologist;

b. Selective revegetation of areas with the appropriate native plant species selected by a qualified biologist/restoration ecologist and based on analysis of existing high quality native habitat of the type to be restored;

c. Creation of boulder piles;

d. Creation of brush piles;

e. Placement of coverboards;

f. Placement of salvaged tree materials (i.e., trunks and branches) into conserved areas;

g. Conduct a brown-headed cowbird (*Molothrus ater*) trapping program for 3 years; and

h. Creation of potential bat roosting habitat by installing and maintaining 3 bat houses in suitable locations on the Project Site.

Planting areas within the acreage on the Project Site described in Mitigation Measures C-1 through C-5 may include temporary irrigation necessary to ensure the long-term viability of plantings.

The acreage amounts set forth in Mitigation Measures C-1 through C-5 are estimates. The final acreage amounts shall be established in accordance with the final design plan for the Project approved by the applicable agencies.

Mitigation Measure C-7 Forest Lawn shall use reasonable efforts to salvage seeds and bulbs from Catalina mariposa lily, Southern California black walnut, and ocellated Humboldt lily to be used in a propagation

program and used in the selective revegetation program as provided for in the plan described in Mitigation Measure C-6 prepared by a qualified biologist/restoration ecologist. Collected plant material which cannot be used on-site shall be dedicated to a native plant nursery or conservation entity skilled and actively engaged in the propagation of plant material to be used as deemed appropriate by that entity.

Mitigation Measure C-8 Forest Lawn shall retain a qualified biologist/restoration ecologist to identify degraded on-site and off-site streambeds and/or "waters of the U.S." (i.e., CDFG, Regional Water Quality Control Board and/or Corps jurisdictional areas) and identify opportunities for creation, restoration and/or enhancement. Areas for consideration may include areas on the Forest Lawn Property or other properties located within the Los Angeles River watershed, including headwaters of the Los Angeles River.

The acreage to be created, restored or enhanced shall be determined on a mitigation to impact ratio (e.g., 1:1 or 2:1) and based on functional assessments (CRAM or similar methodology) of both impacted areas and proposed mitigation areas. Mitigation for Project impacts generally should be calculated at a 1:1 ratio for creation; a 2:1 ratio for restoration; and a 3:1 ratio for enhancement subject to approval of the applicable agencies. Implementation of this mitigation measure may also be satisfied by payment of a mitigation fee to a third party responsible for mitigation implementation and long-term maintenance for off-site mitigation, subject to the approval of CDFG, the Corps, and the Regional Water Quality Control Board, as applicable. Functional assessments are not required for pre-existing mitigation banks.

The qualified biologist/restoration ecologist and/or third party responsible for off-site mitigation, if applicable, shall consult with the Corps, Regional Water Quality Control Board and CDFG regarding appropriate mitigation site selection. If a pre-existing mitigation bank or similar instrument is not in place, the biologist/ecologist shall prepare a creation, restoration and/or enhancement plan for the mitigation areas. The plan shall demonstrate that the restoration areas are hydrologically and edaphically suitable for the permanent establishment of a self-sustaining riparian area, subsequent to creation/restoration/enhancement techniques. The plan shall also demonstrate that the area(s) proposed for mitigation can be permanently conserved and protected, and shall include assurances

to effectuate permanent conservation and protection. The plan shall obtain all necessary City approvals, as applicable.

To offset temporal effects of Project implementation, construction of the riparian habitat within Drainage L as provided for in Mitigation Measure C-4 shall be initiated within 6 months of commencement of Project construction activities in jurisdictional areas. Further, creation, conservation, and restoration of remaining areas as provided for in Mitigation Measures C-1, C-2, C-3, and C-5 and this mitigation measure may be implemented on a phased basis in accordance with Project implementation, subject to approval of CDFG and the Corps, as applicable.

Mitigation Measure C-9 Prior to the removal of any coast live oak, western sycamore, or Southern California black walnut tree(s) greater than or equal to 4 inches at diameter-at-breast height ("DBH"), Forest Lawn shall prepare a map, based on the existing tree report and corresponding to the particular phase of development proposed, indicating the specific tree(s) and its tag number, to be removed, and the removal of such trees shall be mitigated for as follows:

a. The replacement ratios for riparian-associated trees in CDFG jurisdictional areas to be removed are as follows: trees between 4 to 5 inches DBH shall be replaced at 2:1; trees from 5 to 12 inches DBH shall be replaced at 3:1; trees from 12 to 24 inches DBH shall be replaced at 5:1; trees from 24 to 36 inches DBH shall be replaced at 10:1; and trees greater than 36 inches DBH shall be replaced at 15:1. Replacement trees shall be acorns or saplings, and shall be of the same species as that removed. Replacement trees may be planted either on the Project Site or off-site, and may be planted in connection with the creation, restoration, and/or enhancement of habitat required pursuant to other Project mitigation measures.

b. CDFG jurisdictional replacement trees may be used to satisfy the City required replacement of non-jurisdictional trees. If CDFG jurisdictional replacement trees are not used to satisfy City required replacement of non-jurisdictional trees, the replacement ratios for upland trees not within CDFG jurisdictional areas to be removed are as follows: each tree shall be replaced with a coast live oak or Southern California black walnut at a 2:1 ratio at an on-site or other City-approved location:

i. Coast live oaks shall be replaced either by acorns or by 1-gallon trees. Southern California black walnuts shall be replaced by 1-gallon trees.

c. For each coast live oak greater than or equal to eight inches DBH removed, one of the replacement trees shall include a coast live oak tree sapling that is approximately one inch caliper in thickness and 3 to 4 feet in height. In addition, Forest Lawn shall pay to the City $670 per oak tree removed greater than or equal to eight inches DBH, which sum shall be held in trust for use by the City for oak tree preservation and installation (as required by that certain 1998 Stipulated Judgment between Forest Lawn and the City).

d. Prior to planting of replacement trees, a qualified biologist/ restoration ecologist shall review landscaping and irrigation systems which are adjacent to the replacement trees to determine that such landscaping and irrigation systems are compatible for the survival of the replacement trees.

e. Exemptions from Replacement Tree Requirements.

i. The routine maintenance of a non-jurisdictional coast live oak, western sycamore or Southern California black walnut tree under the direction of a registered arborist or qualified biologist retained by Forest Lawn shall not require any mitigation.

f. Tree mitigation shall be implemented on a phased basis in accordance with Project implementation, subject to approval of the City, CDFG, and the Corps, as applicable.

g. A tree canopy replacement program may be implemented as an alternative to the tree replacement ratios described above, subject to the approval of the applicable agencies, provided that any such tree canopy replacement program shall comply with the requirements of the City's Protected Tree Ordinance.

Mitigation Measure C-10 Prior to the commencement of grading activities, Forest Lawn shall retain a qualified biologist to conduct pitfall/funnel trapping and coverboard surveys for regulatory status reptiles within pending disturbance areas and on a weekly basis during the initial two months of ground disturbance. Any regulatory status reptile species captured within pending disturbance areas or during the

initial two months of ground disturbance shall be relocated to suitable areas not proposed for disturbance as directed by a qualified biologist. Temporary exclusionary fencing shall be installed as directed by a qualified biologist to discourage relocated regulatory status reptile species from returning to the pending disturbance areas. The installation of exclusionary fencing in suitable habitat shall be phased in accordance with Project grading as it occurs.

Mitigation Measure C-11 If Project grading and construction activities requiring the removal of vegetation occur during the breeding season for birds, nesting bird surveys shall be conducted within the disturbance footprint plus a 100-foot buffer in accordance with the following:

a. A minimum of 2 pre-construction surveys for nesting birds shall be conducted 5 days apart prior to construction. The last survey shall be conducted no more than 3 days prior to the initiation of clearance/construction work;

b. If pre-construction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required;

c. If active nests of birds are found during the surveys, a species-specific no-disturbance buffer zone shall be established by a qualified biologist around active nests until a qualified biologist determines that all young have fledged (no longer reliant upon the nest).

Mitigation Measure C-12 Prior to Project-related clearing, grubbing, demolition, and tree removal, Forest Lawn shall conduct pre-construction surveys, as determined by a qualified biologist, for regulatory status bat roosts within the disturbance footprint and shall include a 100-foot buffer. If present, regulatory status bat species shall be passively relocated under the supervision of a qualified biologist prior to such Project-related construction activities.

Mitigation Measure C-13 If Project-related clearing, grubbing, demolition, and tree removal occur during the maternity roosting season for regulatory status bat species (April 1 to September 30), a qualified biologist shall survey for regulatory status bat species' maternity roosts within the disturbance footprint and shall include a 100-foot buffer, in accordance with the following measures:

a. A minimum of 2 pre-construction surveys for maternity roosts shall be conducted 5 days apart prior to construction. The last

survey shall be conducted no more than 3 days prior to the initiation of clearance/construction work;

b. If pre-construction surveys indicate that maternity roosts are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required;

c. If active maternity roosts of regulatory status bat species are found during the surveys, a no-disturbance buffer zone shall be established by a qualified biologist around such active maternity roosts until a qualified biologist determines that the maternity roost is no longer occupied.

Mitigation Measure C-14 Forest Lawn shall retain a qualified biologist to monitor grading activities on the Project Site. The monitor shall ensure compliance with these mitigation measures. For purposes of these mitigation measures, a qualified biologist/ecologist is defined as a working professional with an educational and work history background in biological disciplines including field biology, plant and animal taxonomy, restoration ecology, biogeography, or related fields, and substantial field experience in cismontane southern California, particularly in riparian, woodland, scrub and chaparral habitats.

Mitigation Measure C-15 Temporary construction fencing shall be installed at the interface of the phased Project development areas and conserved natural areas during grading and construction of those areas.

Mitigation Measure C-16 "No Trespassing – Natural Habitat Area" signs shall be posted on the outside of the construction fencing areas adjacent to conserved natural areas.

Mitigation Measure C-17 Except as provided for in this Mitigation Measure, future landscaping within the to-be-developed cemetery portion of the Project Site shall not include any of the plants listed under the California Invasive Plant Council's Invasive Plant Inventory, dated February 2006 (update dated Spring 2007) with the exception of fescue (Festuca spp.). The use of fescue shall not be permitted within 10 feet of the boundary of the Project Site, within 10 feet of a CDFG jurisdictional streambed, or within 10 feet of any on-site conserved areas; however, the use of fescue shall be permitted within such 10-foot areas where a physical barrier, as determined appropriate by a qualified biologist, exists between the landscaping and the boundary of the Project Site, the jurisdictional streambed, or

the on-site conserved areas. Potential impacts associated with fescue should be minimized by the utilization of sod rather than planting by seed and by periodic mowing to suppress seed production.

Mitigation Measure C-18 All grading and construction contractors shall receive copies of all mitigation measures required to reduce impacts to biological resources. Additionally, verbal instruction shall be provided by Forest Lawn to all site workers to insure clear understanding that biological resources are to be protected on the Project Site in accordance with the mitigation measures. A brochure depicting the sensitive biological resources on-site shall be provided to all grading and construction contractors.

Mitigation Measure C-19 All lighting adjacent to natural areas shall be of low luminescence, directed downward or toward structures, and shielded to the extent necessary to prevent artificial illumination of natural areas and protect nocturnal biological resources, as determined appropriate by a qualified biologist.

Mitigation Measure C-20 Forest Lawn shall mitigate potential impacts from construction of detention basins which are located partially off-site on Griffith Park at a 2:1 ratio. The restoration site(s) shall be located in a canyon area that can be restored in a manner similar in structure and quality to the up to 0.59 acre of habitat types that would be removed as a result of the proposed construction or partial construction of three debris basins located on the Griffith Park northerly property boundary. The restoration program should be designed in a Habitat Mitigation and Monitoring Program (HMMP), to be prepared by Forest Lawn or its designated agents and approved by the City Planning Department and Recreation and Parks Department and applicable agencies. The program shall include replacement of protected trees that would be removed with project implementation, in a manner consistent with Proposed Mitigation Measure C-9, above, relative to protected tree replacement parameters. Appropriate relocation of detected ocellated Humboldt lilies that would be disturbed by off-site basin construction shall also be required in the HMMP. Lastly, “waters of the U.S.” and streambed areas disturbed by basin construction shall be mitigated at a 2:1 basis at the restoration site or at an off-site location approved by the Corps and CDFG, in a manner consistent with Mitigation Measure C-8 relative to the restoration of “waters” and streambeds in the Los Angeles River watershed.

Mitigation Measure C-21 Prior to the issuance of grading permits for the Project, Forest Lawn shall obtain all necessary permits from the Army Corps, CDFG, and the RWQCB, as applicable.

d. Level of Significance After Mitigation

With implementation of the mitigation measures provided above, the Project would not result in any significant impacts associated with biological resources.

D.1 Cultural Resources – Historic Resources

a. Environmental Impacts

The Project would construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. As part of the Project, two maintenance buildings identified as contributing features of secondary significance would be removed. These buildings include the Maintenance Office and Maintenance Garage, both constructed in 1955.

The developed portion of the Forest Lawn property appears to be potentially eligible for designation as a designed historic landscape. The proposed Project, which would expand the cemetery facilities within the undeveloped portions of the Project Site, and include the continued development of interment sites within the existing Memorial-Park, is consistent with the historic use and would not affect the significance of the developed portion of the Memorial-Park – Hollywood Hills property. The Project, including the potential demolition of two contributing features of secondary significance in the maintenance area, would not affect the eligibility of the Memorial-Park for listing. The Project does not involve the demolition, relocation, or conversion of a significant contributing feature. Further, development of the Project would not reduce the integrity or significance of contributing features on the Project Site or important resources in the vicinity. Thus, the Project would not result in a substantial adverse change in the significance of an historical resource. Therefore, the Project would not result in significant impacts with respect to historical resources.

The potential demolition of the Maintenance Office and Maintenance Garage, located within the maintenance area and identified as contributing features of secondary significance would not “materially impact” the Memorial-Park such that their demolition

would threaten the Memorial-Park's apparent eligibility for California Register listing, or eligibility for Los Angeles Historic Cultural Monument listing. While these structures were constructed during Forest Lawn's period of significance (1951-1966) and have historical associations with Hubert Eaton, they are of secondary significance in the context of the Memorial-Park as a designed historic landscape. These maintenance features are separated from the landscaped area of the Memorial-Park and were historically screened from public view through changes in topography and dense landscaping. Continued preservation of the Memorial-Park and its primary contributing features may necessitate changes to the support and maintenance buildings that enable the property's historic use to continue. Accordingly, the developed portion of the Forest Lawn Memorial-Park – Hollywood Hills property would remain eligible for California Register listing with implementation of the proposed Project, which includes the potential demolition of two contributing features of secondary significance. Therefore, the proposed Project would not have a significant adverse impact on the potentially eligible developed portions of the Memorial Park, nor would it result in significant impacts with respect to any historic resource under CEQA.

In addition, as discussed in detail in the *Impact Assessment* prepared by LSA, the proposed Project would not have a significant impact on the historic resources of the adjacent Griffith Park. Specifically, while development within the East Area of the Project Site would somewhat affect the setting of the westernmost portion of Griffith Park and development of the retention basins would also affect the wilderness area of the park, the proposed Project would not significantly alter character-defining features that justify Griffith Park's inclusion in the California Register or designation as an HCM. Besides the wilderness area, the closest historically sensitive resources within Griffith Park are approximately one-third of a mile away from the Project Site (e.g., Travel Town, the "Little Nugget" railcar, and the Hollywood sign) and these resources are separated from the Project Site by changes in topography and adjacent development.

The wilderness area is a historically sensitive resource; however development of the East Area and the retention basins would have an impact on a relatively small portion of the wilderness area. Furthermore, the setting of this portion of the wilderness area has been directly impacted by development in Griffith Park itself. In addition, a portion of the wilderness area was deeded to Griffith Park by Forest Lawn in 1987 and 2003, long after Griffith Park's period of significance. Although the HCM nomination specifically calls out some views in its description of the Griffith Park, there is no mention of viewsheds near the property line within Forest Lawn, which suggests that views from this area are not considered particularly character-defining for the park as a whole.

Based on the above, the Project would not result in significant impacts to on-site historic resources or historic resources within Griffith Park.

b. Cumulative Impacts

The analysis of cumulative impacts to historic resources is based on whether impacts of the proposed Project and related projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar context or property type. Impacts to historic resources tend to be site-specific. Specifically, cumulative impacts would involve projects affecting local resources with the same level or type of designation or evaluation, projects affecting other structures located within the same National Register District, or projects that involve resources that are significant within the same context as resources associated with the proposed Project. The known related projects would not impact historic resources of the same character (based on context, building type, evaluation, and designation) as those that are present within the Project Site. In addition, due to the identification of the potentially eligible designed historic landscape within the Project Site and the distance of the related projects to this potential resource, related projects are not anticipated to impact this resource. Therefore, cumulative impacts on historic resources are anticipated to be less than significant.

c. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to historic resources. Nonetheless, the following measure is recommended to further reduce any potential impacts:

Mitigation Measure D.1-1 If demolition of one or more of the two contributing features of secondary significance in the maintenance area occurs, then each building that is proposed for demolition should be documented by an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards in a manner that is similar to Level III of the Historic American Building Survey (HABS). The documentation shall consist of the following:

- 35mm archival quality black and white photographs of all exterior elevations, interior views, character-defining features, and context views;
- Site plan showing the view of photographs and building footprint;
- If available, copies of elevation drawings, floor plans, measured drawings, historic photographs, and newspaper articles; and
- Written data discussing the history and development of the property. The current report will satisfy some of the requirements for the written data.

d. Level of Significance After Mitigation

The proposed Project's impacts to historical resources would be less than significant without mitigation. Implementation of the listed mitigation measure would further reduce any potential impacts.

D.2 Cultural Resources – Archaeological and Paleontological Resources

a. Environmental Impacts

(1) Archaeological Resources

No prehistoric archeological resources were observed on the Project Site. Further, the historic archeological resources observed are not recommended for listing in the National or California Register. Grading, excavations, and the development of proposed structures, interment sites and other improvements are anticipated to result in the disturbance and grading within an area with the recorded artifacts associated with the Furer Ranch that was developed in the early 1900s. The ten features recorded are not eligible for listing in the National Register nor in the California Register due to the poor integrity of the water conveyance system, road, wall, and bridges, and because these features do not appear to be related to persons or events important to the development of the San Fernando Valley or to the history of Valleywood. The features are not associated with an event or person of recognized importance. Therefore, the removal of these features would not result in a significant impact to an archaeological resource that is found to be important under the criteria of CEQA and no mitigation measures are required. Nevertheless, because buried remains often go undetected during a pedestrian survey, the build date and builder of the 1916 Furer house are unknown, and the surrounding area is sensitive for historic resources, future expansion and development could impact unknown historic resources. Accordingly, Mitigation Measure D.2-1 and D.2-2 are recommended to reduce impacts to previously unidentified archaeological resources in the unlikely event any such materials are encountered.

(2) Paleontological Resources

With regard to paleontological resources, no paleontological resources are known to exist at the Project Site. In addition, the uppermost soil layers are not likely to contain paleontological resources. However, the proposed Project would result in excavations and grading on previously undisturbed portions of the Project Site and would also result in deeper excavations on previously disturbed portions of the Project Site. As such, the possibility exists that a subsurface paleontological resource may be found during earth work activities. Accordingly, Mitigation Measure D.2-3 is recommended to reduce impacts

to previously unidentified paleontological resources in the unlikely event any such materials are encountered.

(3) Human Remains

The Project Site is not known to contain any buried human remains outside of the designated interment sites within the developed portions of the Forest Lawn Memorial-Park. Pursuant to Government Code Section 65352.3, the Native American Heritage Commission was consulted during the NOP process and did not provide any response to the NOP consultation request. In addition, no recorded Native American burial sites were identified during the cultural resources records search or archival records search or field surveys. Nevertheless, grading and earthwork activities have an inherent potential to disturb previously undiscovered and unknown buried human remains, including those of Native Americans. Accordingly, Mitigation Measures D-4 is recommended to ensure any unanticipated impacts to buried human remains, including those of Native American Indians are mitigated to less-than-significant levels in accordance with the prescribed statutes of State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

b. Cumulative Impacts

The Project in combination with cumulative development could contribute to the progressive loss of undeveloped land, which could potentially contain archaeological resources. Although no previously recorded prehistoric archaeological sites occur on the Project Site or its vicinity, implementation of the recommended mitigation measures regarding the protection of such resources would ensure that potential impacts would be reduced to a less than significant level. Impacts to archaeological and paleontological resources tend to be site specific and are addressed on a site-by-site basis. Similar to the proposed Project, determinations regarding the significance of any cultural resources would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Furthermore, the proposed Project's impacts to cultural resources would be less than significant with the incorporation of mitigation measures. Therefore, the proposed Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be less than significant.

c. Mitigation Measures

The following mitigation measures are recommended to ensure that impacts to yet unknown archaeological and paleontological resources would be mitigated in the unlikely event any resources are encountered during the grading and excavation phase.

Mitigation Measure D.2-1 If any archaeological materials are encountered during the course of the Project development, the Project shall be halted in the area of discovery. The services of an archaeologist shall be secured by contacting the Center for Public Archaeology - Cal State University Fullerton, or a member of the Society of Professional Archaeologist (SOPA) or a SOPA-qualified archaeologist to assess the resources and evaluate the impact. Copies of the archaeological survey, study or report shall be submitted to the UCLA Archaeological Information Center.

Mitigation Measure D.2-2 The Applicant shall retain a qualified archaeologist to monitor any ground-disturbing activities in the currently undeveloped southeastern portion of the Project Site near the Adolf Furer house location. The monitor shall have the authority to temporarily halt grading operations in the area of the discovery until the resources are properly assessed and subsequent recommendations are determined by the lead agency.

Mitigation Measure D.2-3 If any paleontological materials are encountered during the course of the Project development, work in the area should be halted. The services of a qualified paleontologist shall be secured by contacting the Center for Public Paleontology - USC, UCLA, Cal State Los Angeles, Cal State Long Beach, or the Los Angeles County Natural History Museum, to assess the resources and evaluate the impact. In addition, a report on the paleontological findings shall be prepared by the qualified paleontologist. A copy of the paleontological report shall be submitted to the Los Angeles County Natural History Museum.

Mitigation Measure D.2-4 Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered on-site, no further disturbance shall occur until the Applicant or its contractor contacts the County Coroner and the Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Applicant or its contractor shall notify the County Coroner immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Resource Center, which shall then determine and notify a most likely descendant of the deceased. The most likely descendant may inspect the site of the discovery with the permission of the landowner, or his or her authorized representative. The most likely descendant shall complete its inspection within 48 hours of its notification by the Native American Heritage Commission. The most

likely descendant may recommend scientific removal and analysis of human remains and items associated with Native American burials.

d. Level of Significance After Mitigation

No known previously recorded pre-historic, archaeological or paleontological resources or human remains have been recorded on the Project Site or in the immediate Project vicinity. Implementation of Mitigation Measures D.2-1 through D.2-4 would reduce any unforeseen project impacts associated with the unlikely discovery or disturbance of any Native American human remains or archaeological and paleontological resources to less than significant levels.

E. Geology and Soils

a. Environmental Impacts

(1) Geologic Hazards

(a) Earthquake Hazards

There are no known active faults in or within 2.5 miles of the Project Site. The Hollywood Fault is the closest potentially active fault, and it is 2.6 miles to the south at its closest point. Movement upon distant active faults will cause varying intensity of ground shaking at the Project Site, as throughout all of Southern California. Pursuant to existing law and applicable regulations, design and construction of the Project slopes and structures will be required to be in conformance with the applicable building code design parameters. Compliance with applicable laws and regulations encompassed in the City of Los Angeles Building Code will reduce the potential for the proposed Project to cause or accelerate geologic hazards related to seismic shaking which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Therefore, Project impacts related to seismic shaking would be less than significant.

Ground rupture occurs when movement on a fault breaks through to the surface. Surface rupture usually occurs along preexisting fault traces where zones of weakness already exist. The State has established Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which zones are regulatory zones that encompass surface traces of active faults with a potential for future surface fault rupture. As the Project Site is not located within a State-established Earthquake Fault Zone, the ground rupture hazard for the Project Site is considered to be low. Therefore, the Project would not cause or accelerate geologic hazards related to ground rupture which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, impacts related to ground rupture would be less than significant.

(b) Landsliding

Earthquake-induced landsliding often occurs in areas where previous landslides have moved and in areas where the topographic, geologic, geotechnical and subsurface ground water conditions are conducive to permanent ground displacements. As previously noted, hillside areas south of the West, Central, and East Areas of the Project Site are located in an areas defined by the California Geological Survey as "Earthquake-Induced Landslide" zones. However, this designation is based upon the steepness of slope rather than actual geologic conditions, and is generally applied to hillside areas across the state, without thorough evaluation of specific site stability. In actuality, reconnaissance geologic mapping of the Project Site found that the designated slopes near the Project Site are underlain by dense units of the Topanga Formation and are considerably stable. The potential for such earthquake-induced landsliding is considered low. However, as there remains a potential for earthquake-induced landsliding, the proposed Project could result in a potentially significant impact. As such, Mitigation Measure E-1 is proposed to reduce impacts to a less than significant level. Impacts subsequent to the implementation of Mitigation Measure E-1 are summarized below.

Regarding general slope stability (i.e., slope instability not induced by an earthquake event), structural planes (bedding) within the coarse grained sediments of the Topanga Formation are not well developed and generally incline at a rather steep angle. The Geotechnical Report indicates that geologic structure should not adversely impact the stability of the high, 2:1 gradient cut slopes. As a result, the proposed Project would result in a less than significant impact with respect to general slope stability and landsliding. Nonetheless, Mitigation Measure E-1 is recommended below to further reduce this less than significant impact by recommending detailed geologic mapping supported with subsurface investigation for each phase of development.

(c) Liquefaction

Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. As a result of earthquake-induced ground motions, the soils may acquire a high degree of mobility, which can lead to lateral spreading, consolidation and settlement of loose sediments, ground oscillation, flow failure, loss of bearing strength, ground fissuring, and sand boils. After liquefaction has developed, it can propagate upward into overlying, non-saturated soil as excess pore water escapes. Research has shown that saturated, loose sands with silt content less than about 25 percent are most susceptible to liquefaction, whereas other soil types are generally considered to have a low susceptibility. Liquefaction susceptibility is related to numerous factors, and the following conditions must exist for liquefaction to occur:

- Sediments must be relatively young in age and must not have developed large amounts of cementation;
- Sediments must consist mainly of cohesionless sands and silts;
- The sediment must not have a high relative density;
- Free groundwater must exist in the sediment; and
- The site must be exposed to seismic events of a magnitude large enough to induce straining of soil particles.

According to the State Seismic Hazard Maps (Burbank Quadrangle), the Project's development areas are not located in an area conducive to the liquefaction phenomenon. There is a small chance for liquefaction in Sennett Canyon, but this is outside of planned development areas. Since no development would occur in Sennett Canyon, no impacts would occur if soils in Sennett Canyon were to experience liquefaction during a seismic event. Therefore, the Project would not cause or accelerate geologic hazards related to liquefaction which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, impacts related to liquefaction would be less than significant.

(d) Ground Lurching

Ground lurching is defined as earthquake motion at right angles to a cliff or bluff, or more commonly to a stream bank or artificial embankment that results in yielding or material in the direction in which it is unsupported. The initial effect is to produce a series of more or less parallel cracks separating the ground into rough blocks. These cracks are generally parallel with the top of the slope or embankment. Upon completion of Project grading, ground lurch should present little or no hazard to Project development. Accordingly, impacts related to ground lurching would be less than significant.

(e) Differential Settlement

Differential settlement is a process in which soils in a given area settle at unequal rates. If differential settlement occurs within the soils supporting a structure, it can result in stress, tilt, and damage to the structure. Seismically induced differential settlement is most often associated with liquefaction, or compaction of compressible soils. Areas of uncompacted fill from past grading operations exist on the Project Site. The largest of these is a reported organic rich fill situated in the East Area. Based upon a detailed field investigation conducted as part of the Geotechnical Report, this fill is less than 50 feet in depth. Since uncompacted fills are subject to long-term settlement, impacts from potential development of structures in areas underlain by uncompacted fill without mitigation would be considered potentially significant. Lawn crypts and low height garden walls would not

significantly impacted by differential settlement and, therefore, do not require mitigation. Mitigation Measure E-1 is proposed to reduce impacts from potential development of structures to a less than significant level. Impacts subsequent to the implementation of Mitigation Measure E-1 are discussed below.

(f) Methane Hazards

There are four known former disposal areas on the property, including a Caltrans disposal area, a closed 2.5-acre disposal area, an area referred to as "Former Disposal Area 1," and an area referred to as "Former Disposal Area 2." The Caltrans disposal area borders Forest Lawn Drive and was used by Caltrans for construction debris during the construction of the 101 Freeway in the early 1960s. The remaining disposal areas primarily consist of green waste (e.g., tree branches, floral arrangements). The 2.5-acre disposal area was closed in 1985. A post-closure use plan was approved by the Local Enforcement Agency for Former Disposal Area 1 in July 2007 and for Former Disposal Area 2 in June 2009. As discussed in Section IV.F, Hazardous Materials/Risk of Upset, of this Draft EIR, the generation of landfill gases has been evaluated and localized areas of methane gas have been detected within the limits of former disposal areas. Earthwork activities occurring in the vicinity of the former disposal areas would be completed in a manner consistent with applicable Cal-OSHA regulations and applicable closure plans. Specifically, earthwork activities within the vicinity of these areas would be monitored for the presence of methane gas under OSHA and Cal-OSHA requirements. If methane levels are found in excess of OSHA standards, protection measures would be implemented in accordance with OSHA and Cal-OSHA requirements. Additionally, the Project would comply with the Los Angeles Methane Seepage Regulations as required by the Department of Building and Safety prior to the issuance of building permits.

Compliance with the requirements of laws related to the post-closure use of the former disposal areas, the post-closure use plan, and compliance with the City of Los Angeles Methane Seepage Regulations as required by the Department of Building and Safety would ensure impacts associated with localized methane hazards would be less than significant. For further discussion of the former disposal areas see Section IV.F, Materials – Risk of Upset, of this Draft EIR.

(2) Sedimentation and Erosion

(a) Construction

The Project would result in soil exposure during construction from grading and earthmoving activities, and there is the potential for construction activities to temporarily increase sedimentation and erosion on the Project Site. Nevertheless, Project construction activities would occur in compliance with state and local requirements as they pertain to erosion control measures, including grading and dust control measures imposed via City

grading permit regulations. In addition, during construction, BMPs included as part of the proposed Project's SWPPP would be implemented, consistent with the NPDES Construction General Permit.

With implementation of BMPs under applicable State and local requirements, the proposed Project would not constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or accelerate the natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site during Project construction. Therefore, impacts related to sedimentation and erosion during Project construction would be less than significant. Please refer to Section IV.G, Hydrology/Water Quality, of this Draft EIR for a more detailed discussion of erosion and water quality impacts.

(b) Operation

Although site investigations found the potential to be low, the erosion of topsoils by surface water runoff and/or shallow soil slumping of the outer 1 to 3± feet of the topsoil may occur on the face of the steeper natural slopes designated as "hillside areas" south and above proposed development of the Central and East Areas. As detailed in the discussion of Project Design Features (PDFs) in Section IV.G, Hydrology/Water Quality, of this Draft EIR, and outlined in the Proposed Hydrology & Preliminary Hydraulic Analysis for Forest Lawn Memorial Park (see Appendix E), the Project would construct debris and runoff containment basins in these hillside areas where the natural drainage swales flow from the hilly areas to the south onto the Project. These PDFs would serve to slow down the velocity of storm runoff and provide a means of reducing sediment load. Further, the proposed Project would implement applicable SUSMP requirements, which would assist in reducing on-site erosion. As such, the proposed Project would not constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or accelerate the natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site during Project operation. Accordingly, impacts related to sedimentation and erosion during Project operation would be less than significant. Nevertheless, mitigation has been proposed in Section IV.G, Hydrology/Water Quality, of this Draft EIR to further reduce impacts resulting from stormwater flows and their effect on sedimentation or erosion.

(3) Landform Alteration

The proposed Project would entail removing earthen material from hillsides through grading (cut slopes) and filling the adjacent small canyon areas with this earthen material (fill slopes) to create ground conditions more suitable to receive the proposed structures, walls and garden areas. This grading is primarily at the base of the existing hilltop, to the south of existing developed property, and not visible from public vantage points. There are

no distinct and prominent geologic or topographic features would be adversely affected by the Project. Sennett Creek would not be disturbed by the Project with the exception of a crossing over the creek near the eastern portion of the Project Site that is not visible from public vantage points. Therefore, Project impacts related to landform alteration during grading would be less than significant.

b. Cumulative Impacts

Geotechnical impacts related to future development in the City of Los Angeles would involve hazards associated with site-specific soil conditions, erosion, and ground-shaking during earthquakes. These impacts are generally site specific for each development site and would not be common to (nor shared with, in an additive sense) the impacts on other sites. Furthermore, development of related projects would be subject to uniform site development and construction standards, including applicable provisions of Chapter IX, Division 70 of the Los Angeles Municipal Code which addresses grading, excavations, and fills on a site specific basis. As there are no known related projects that are contiguous to the Project Site, cumulative geotechnical impacts would be less than significant.

c. Mitigation Measures

The following mitigation measure is recommended to reduce geology and soils impacts to a less-than-significant level:

Mitigation Measure E-1 Prior to issuance of a building permit, a site-specific geotechnical report shall be prepared for the individual development and/or structure. The geotechnical recommendations in the site-specific geotechnical reports shall be implemented. The site-specific geotechnical reports shall include all applicable recommendations of the *Geologic and Geotechnical Engineering Review of Master Plan Grading Plan, Forest Lawn Memorial-Park, 6300 Forest Lawn Drive, Hollywood Hills, City of Los Angeles, California,* by GeoSoils Consultants, Inc., dated April 28, 2008 (included as Appendix E to this Draft EIR), the site-specific study shall determine which of the following measures listed below are applicable for implementation of the individual development phase and/or structure:

Fill Slopes

Fill slopes shall be constructed at gradients of 2:1 (horizontal to vertical) or flatter.

All loose, compressible soils on natural slopes shall be removed by benching into firm bedrock prior to placement of fill. Typical benches

are four feet high into firm bedrock. Compaction shall at least meet minimum code standards and extend to face of slope.

Cut Slopes

All cut slopes shall be constructed at gradients of 2: 1 (horizontal to vertical) or flatter. All cut slopes should be monitored by the geologist of record during grading.

Local steepening of cut slopes may be feasible but requires specific analysis by the geotechnical engineer of record.

Cut slopes that face in the same direction as the prevailing drainage shall be protected from slopewash by a non-erosive interceptor swale (V-ditch) placed at the top of the slope.

Pad Capping

The developable garden area and the developable ground areas, where underlain by dense bedrock at grade shall be over-excavated at least seven feet and rebuilt to grade with compacted fill. This will ease future excavation in these areas.

Compacted Fills

On-site soils and bedrock materials excavated from cuts may be used in the fill, provided such material has been determined to be suitable by the geotechnical engineer of record. Roots, tree branches, and other deleterious matter missed during clearing shall be removed from the fill as directed by the geotechnical engineer of record.

Rock fragments less than six inches in diameter may be used in the fill, provided:

1. they are not placed in concentrated pockets;

2. there is a sufficient percentage of fine-grained material to surround the rocks; and,

3. the distribution of the rocks is supervised by the geotechnical engineer of record.

Rocks greater than six inches in diameter shall be taken off-site, or placed in accordance with the recommendations of the geotechnical engineer of record in fill areas designated as suitable for rock disposal.

Material that is spongy, subject to decay, or otherwise considered unsuitable shall not be used in the compacted fill.

Representative samples of materials to be used as compacted fill shall be analyzed in the laboratory by the geotechnical engineer of record to determine their physical properties. If any material other than that previously tested is encountered during grading, the appropriate analysis of this material shall be conducted by the geotechnical engineer of record as soon as possible.

Material used in the compacting process shall be evenly spread in thin lifts not to exceed six inches in thickness, watered, processed and compacted to obtain a uniformly dense layer. The fill shall be placed and compacted on a horizontal plane, unless otherwise approved by the geotechnical engineer of record. This includes material placed for slope repairs, and utility trench backfills on slope areas.

Each layer shall be compacted to at least a minimum of 90 percent of the maximum density in compliance with the testing method specified by the controlling governmental agency (in general, ASTM D-1557-02 would be used). For all fills greater than 30 feet in vertical thickness, the portion of the fill below 30 feet should be placed at a relative compaction of at least 95 percent. If compaction to a lesser percentage is authorized by the Department of Building and Safety because of a specific land use or expansive geotechnical conditions, the area to receive fill compacted to less than 90 percent shall either be delineated on the grading plan or appropriate reference made to the area in the geotechnical report.

All fills should be placed at approximately 120 percent of optimum moisture. If excessive moisture in the fill results in failing tests or an unacceptable "pumping" condition, then the fill shall be allowed to dry until the moisture content is within the necessary range to meet above compaction requirements, or shall be removed or reworked until acceptable conditions are obtained.

If the moisture content or relative density varies from that required by the geotechnical engineer of record, the contractor shall rework the fill until it is in accordance with the requirements of the geotechnical engineer of record. If a compaction test indicates that the fill meets or exceeds the minimum required relative compaction, but is below 120 percent of optimum, then the fill shall be reworked until it meets the moisture content requirements.

All fills shall be keyed and benched through all topsoils, slopewash, alluvium or creep material, into sound bedrock or firm material where the slope receiving fill is steeper than a ratio of five horizontal to

vertical (in accordance with the recommendations of the geotechnical engineer of record). The standard acceptable bench height is four feet into suitable material.

The key for sidehill fills shall be a minimum of 12 feet and be founded into bedrock or firm materials, unless otherwise specified by the geotechnical engineer of record.

Drainage terraces and subdrainage devices shall be constructed in compliance with City regulations, or with the recommendations of the geotechnical engineer and engineering geologist of record.

A minimum relative compaction of 90 percent is required out to the finish slope face of fill slopes, buttresses and stabilization fills. This may be achieved by either overbuilding the slope a minimum of five feet, and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure, which produces the required compaction.

All fill slopes shall be planted or protected from erosion by methods specified by the Department of Building and Safety.

Fill-over-cut slopes shall be properly keyed through topsoil, colluvium or creep material into rock or firm materials; and the transition should be stripped of all soil prior to placing fill. The fill portion of the slope shall be founded on a key to be determined by the geotechnical engineer.

Grading Control

Inspection of the fill placement shall be provided by the geotechnical engineer during the progress of grading.

In general, density tests shall be made at intervals not exceeding two feet of fill height or every 1000 cubic yards of fill placed. These criteria would vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.

Density tests shall also be made on the surface material to receive fill as required by the geotechnical engineer.

All cleanout, processed ground to receive fill, key excavations, subdrains and rock disposal shall be inspected and approved by the geotechnical engineer prior to placing any fill. It shall be the contractor's responsibility to notify the geotechnical engineer when such areas are ready for inspection. The Department of Building and Safety should also inspect these items prior to fill placement.

Construction Considerations

Erosion control measures, when necessary, shall be provided by the contractor during grading and prior to the completion and construction of permanent drainage controls. Implementation of a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the NPDES General Permit for Stormwater Discharges Associated with Construction Activity, (Construction General Permit) will require erosion control measures.

Dust control measures shall be implemented at all times during grading activities.

Upon completion of grading and termination of inspections by the geotechnical engineer, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval and observation of the geotechnical engineer or engineering geologist.

Care shall be taken by the contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of a permanent nature on or adjacent to the property.

d. Level of Significance After Mitigation

With respect to landsliding, although considered low, there is the potential for earthquake-induced landsliding to occur, resulting in a potentially significant impact. Mitigation Measure E-1 is required to reduce potential earthquake-induced landsliding impacts to a less than significant level. Mitigation Measure E-1 would require site-specific geologic investigations for each development phase and/or structure under the proposed Project. Further, Mitigation Measure E-1 would require all development to adhere to the applicable recommendations of the Project's Geotechnical Report, including the recommendation that all cut slopes be constructed at gradients of 2:1 (horizontal to vertical) or flatter and be monitored by a geologist of record during grading. With implementation of Mitigation Measure E-1, the proposed Project would not cause or accelerate geologic hazards related to landsliding that would result in substantial damage to structures or infrastructure, nor expose people to substantial risk of injury. Accordingly, potential impacts related to landsliding would be reduced to a less than significant level through the implementation of Mitigation Measure E-1.

With respect to differential settlement, there are areas of uncompacted fill material up to 50 feet in depth located throughout the Project's proposed development areas. As a result, these uncompacted fills could result in differential settlement during an earthquake event, resulting in a potentially significant impact. However, Mitigation Measure E-1 is

required to reduce potential differential settlement impacts to a less than significant level. Mitigation Measure E-1 would require site-specific geologic investigations for each development phase and/or structure under the proposed Project and would require all development to adhere to the applicable recommendations of the Project's Geotechnical Report. With implementation of Mitigation Measure E-1, the proposed Project would not cause or accelerate geologic hazards related to differential settlement that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, potential impacts related to differential settlement would be reduced to a less than significant level through the implementation of Mitigation Measure E-1.

All other impacts with respect to geology and soils were found to be less than significant without the implementation of mitigation measures. After incorporation of the mitigation measure listed above, all impacts related to geology and soils would be less than significant.

F. Hazards and Hazardous Materials

a. Environmental Impacts

(1) Construction

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

During the demolition of existing structures and grading/excavation phases, the Project may involve the hauling, routine transport and disposal of potentially hazardous materials, including ACMs, LBPs, oils and lubricants, fuels, waste oil, paints, and adhesives. All hazardous materials encountered or used during demolition, grading/excavation, and construction activities, including ACMs and LBP, would be handled in accordance with all applicable federal, state, and local regulations, which include requirements for proper handling and disposal of hazardous materials. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during construction to less-than-significant levels.

(b) Accidental Release of Hazardous Materials

There is the potential for on-site grading to encounter contaminated soil or disturb known or unknown underground structures, such as USTs, which could lead to soil and/or groundwater impacts and the potential exposure of people and the environment to hazardous materials. However, any previously unidentified contaminated soil that is encountered and determined unsuitable for fill material would be handled in accordance with all applicable local, State, and federal regulations, which include requirements for

disposal of hazardous materials at a facility licensed to accept such waste, based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. As a result, if impacted soils or structures such as USTs are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards.

Many of the on-site structures were constructed prior to the ban on ACMs and LBPs in new building materials, including the Maintenance Office and Maintenance Building. As such, the renovation and/or removal of these buildings could expose workers to ACMs and/or LBPs still present in the buildings, representing a potential environmental hazard to workers.

In accordance with SCAQMD's Rule 1403, a complete survey would be conducted prior to any demolition activities to identify all sources of ACMs. In accordance with the EPA's NESHAP regulation and SCAQMD's Rule 1403, all materials identified as ACMs would be removed by a trained and licensed asbestos abatement contractor. The asbestos removal operations would be conducted in accordance with CAL-OSHA Asbestos for the Construction Industry Standard, SCAQMD and EPA rules and regulations and industry standards. Thus, hazardous materials impacts relative to exposure to asbestos would be less than significant.

Regarding LBPs, a qualified lead-paint abatement consultant would be required to comply with applicable state and federal rules and regulations governing lead paint abatement. Such regulations that would be followed during demolition include Construction Safety Orders 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations. Thus, with compliance with regulatory requirements, hazardous materials impacts caused by exposure to LBPs would be less than significant.

Based on the above, construction of the proposed Project would result in a less than significant impact with respect to the accidental release of hazardous materials.

(c) Soil Gasses

The generation of landfill gases has been evaluated and localized areas of methane gas have been detected within former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. As such, there is a possibility that ground-disturbing activities in this area could result in methane exposure to workers. However, each of these former disposal areas is subject to a Post-Closure Land Use Plan approved by the LEA. The Post-Closure Land Use Plan includes conditions to protect workers from methane exposure during work in the vicinity of these areas. In addition, Cal-OSHA regulates worker exposure to airborne contaminants (such as

methane gas) during construction. All ground-disturbing activities occurring in the vicinity of Former Disposal Area 2 would be completed in a manner consistent the conditions of the Post-Closure Land Use Plans and with applicable Cal-OSHA regulations, which ensure consideration of worker safety during construction activities. Specifically, ground-disturbing activities within the vicinity of these areas would be monitored for the presence of methane gas. If methane levels are found to threaten worker safety, protection measures would be implemented in accordance with Cal-OSHA requirements. Therefore, impacts related to worker safety as it pertains to soil gases would be less than significant.

(d) Emergency Response Plans

The proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route.[12] Construction activities associated with the Project are not anticipated to require any temporary or permanent street closures. If street closures are required, such closures may cause temporary inconvenience along Forest Lawn Drive, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Therefore, construction activities associated with the Project would not be expected to interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(2) Operation

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

The Project has the potential to increase the acquisition, use, handling, storage and disposal of hazardous materials on-site through development of new facilities. All hazardous materials used and disposed of during operational activities would continue to be handled and disposed of in accordance with all applicable federal, state, and local regulations. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during operation to less-than-significant levels.

[12] *City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, Critical Facilities & Lifeline Systems in the City of Los Angeles, September 1996.*

(b) Accidental Release of Hazardous Materials

The Project Site currently contains one 10,000-gallon UST containing unleaded gasoline and one 2,000-gallon UST containing diesel fuel at the fueling area. While no leaks are known to have occurred, USTs have the potential for accidental releases. The operation and maintenance of the Project Site also involves the use of hazardous materials. These materials will continue to be properly stored and maintained. While accidental releases of hazardous materials associated with these sources is not anticipated, unanticipated accidental releases from the USTs or other source would involve notification of appropriate agencies, as well as necessary response actions in accordance with the requirements of applicable agencies. Therefore, potential impacts associated with the accidental release of potentially hazardous materials during Project operations would be less than significant.

(c) Soil Gasses

The Project Site has four former disposal areas that were used primarily for green waste. The generation of landfill gases has been evaluated and localized methane gas has been detected within the former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. Similar to the potential impacts during Project construction, the potential presence of landfill gases presents a physical hazard that should be monitored when performing routine earthwork activities such as grading and excavation activities, as well as during interments, near or within the former disposal areas.

The City has approved Post-Closure Land Use Plans for the disposal areas. The Post-Closure Land Use Plans contain monitoring and mitigation requirements related to development in the former disposal areas, including the continued monitoring of soil gas levels near the former disposal areas. The Project will comply with the requirements of the Post-Closure Land Use plans as required by the LEA. All ground-disturbing activities would be completed in accordance with the conditions of the Post-Closure Use Plans and all applicable Cal-OSHA regulations and requirements. These measures ensure consideration of worker safety during ground-disturbing activities by monitoring methane exposure and implementing protective measures when necessary. Therefore, with implementation of these measures, impacts would be reduced to less-than-significant levels.

The Project Site is located within a City of Los Angeles Methane Zone in accordance with Chapter IX, Division 71 of the LAMC (the City Methane Seepage Regulations). The City of Los Angeles Department of Building and Safety may require methane mitigation for new occupiable buildings constructed on the Project Site if it determines that a hazard may exist from methane intrusion. Prior to development of new occupiable buildings, the

Project would comply with the City of Los Angeles Methane Seepage Regulations as required by the City Department of Building and Safety. With compliance with the post-closure use plans and requirements of the City of Los Angeles Department of Building and Safety, potential impacts associated with the accidental release of methane gas would be mitigated to a less-than-significant level.

(d) Emergency Response Plans

As previously stated, the proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route. Implementation of the Project is not anticipated to require any temporary or permanent street closures. If street closures are required, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Further, emergency vehicles have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, the Project would not be expected to require a new emergency response plan, interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(e) Pesticide Control

For common area landscaping in the commercial and park areas of Forest Lawn, an integrated pest management program would be incorporated. The goal of an integrated pest management program is to keep pest levels at or below threshold levels, reducing risk and damage from pest presence, while reducing the risk from the pest control methods used. Integrated pest management programs achieve these goals through the use of low risk management options by emphasizing use of natural biological methods and the appropriate use of selective pesticides. Integrated pest management programs also incorporate environmental considerations by implementing procedures that minimize intrusion and alteration of biodiversity in ecosystems. Further, all pesticides would be handled, stored, and applied in accordance with applicable regulations and all manufacturer recommendations. In accordance with these requirements, the proposed Project would include source control measures such as education programs for employees in the proper application, storage, and disposal of pesticides that will be used at the Project Site. Therefore, implementation of the Integrated pest management plan and rodent control practices and the handling of all pesticides in accordance with all applicable regulations and recommendations would ensure the proposed Project would not result in a significant impact upon the environment.

b. Cumulative Impacts

Development of the proposed Project in combination with the related projects identified in Section III, Environmental Setting, would not have the potential to increase the risk for accidental release of hazardous materials. Each of the related projects would require evaluation for potential threats to public safety, including those associated with the accidental release of hazardous materials into the environment during construction and operation, emergency response, transport/use/disposal of hazardous materials, and hazards to sensitive receptors (including schools). Because hazardous materials and risk of upset conditions are largely site-specific, this would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Implementation of mitigation would reduce the proposed Project's potential impacts associated with hazardous materials/risk of upset to less-than-significant levels, such that the proposed Project would not combine with any of the related projects to cause a cumulatively significant impact. Further, each related project would be required to follow local, State, and federal laws regarding hazardous materials and other hazards. Therefore, with compliance with local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be less than significant.

c. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to hazardous materials and/or the risk of upset. Nonetheless, the following measures are recommended to further reduce any potential impacts:

Mitigation Measure F-1 If soil contamination is suspected to be present, prior to excavation and grading, the South Coast Air Quality Management District's (SCAQMD) Rule 1166 shall be implemented, as appropriate. If soil contamination is not suspected, but is observed (i.e., by sight, smell, visual, etc.) during excavation and grading activities, excavation and grading within such an area shall be temporarily halted and redirected around the areas until the appropriate evaluation and follow-up measures are implemented, as contaminated in SCAQMD's Rule 1166, so as to render the area suitable for grading activities to resume. The contaminated soil discovered shall be evaluated for grading activities to resume. The contaminated soil discovered shall be evaluated and excavated/disposed of, treated in-situ, or otherwise managed in accordance with all applicable regulatory requirements.

d. Level of Significance After Mitigation

With compliance with regulatory requirements, potential impacts associated with exposure to potentially hazardous materials would be less than significant. Nonetheless, the mitigation measure above has been proposed to ensure that specific regulatory requirements would be implemented.

G. Hydrology/Water Quality

a. Environmental Impacts

(1) Construction

The proposed Project would include grading of approximately 147 acres of land involving approximately 2.7 million cubic yards of soil. The grading and stockpiling plan is proposed to be divided into three grading areas and three phases, with separate areas of grading on the Project Site (Phase 1 (Central Area), Phase 2 (East Area) and Phase 3 (West Area)). All grading would take place in Drainage Areas A and B. No grading would occur in Drainage Area C.

In addition, buildout of the proposed Project would involve an additional 400,000 cubic yards of soil exported over the next 40 years as a result of grave site development. Construction activities that involve earthwork and grading have the potential to result in significant adverse water quality impacts. Three general sources of potential short-term construction-related stormwater pollution generally associated with construction projects include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) soil erosion and uncontrolled stormwater runoff.

Stormwater discharges during construction activities can compromise the biological, chemical, and physical integrity of a receiving water body. In this case of the Project Site, receiving bodies of water include the previously identified Drainage L, Sennett Creek and ultimately, the Los Angeles River Flood Control Channel, which is located just north of the Project Site. The interconnected process of erosion, sediment transport, and delivery is the primary pathway for introducing key pollutants, such as nutrients (particularly phosphorus), metals, and organic compounds into aquatic systems. The potential impacts of construction activities, construction materials, and non-stormwater runoff on water quality focus primarily on sediment releases. Non-sediment related pollutants that are also of concern during construction include: construction waste materials; chemicals; liquid products; petroleum hydrocarbon products used in building construction or the maintenance of heavy equipment; and concrete-related waste streams. During construction, soil is generally exposed to natural processes such as precipitation

(depending on the time of year) and stormwater runoff, which would be controlled on site and directed to the network of stormdrains and culverts discharging into Sennett Creek and the Los Angeles River Flood Control Channel.

(a) NPDES General Construction Permit

The proposed Project is subject to the NPDES General Construction Permit and would be required to complete a Risk Assessment and Permit Registration Documents. The Permit Registration Documents would include a Notice of Intent, a Risk Assessment, a Site Map, a SWPPP, an annual fee, and a Signed Certification Statement. . The SWPPP would identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The would describe site erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls.

In addition, Project construction would occur in accordance with all City stormwater quality requirements. All grading and site preparation would comply with all applicable provisions of Chapter IX, Division 70 of the LAMC, which includes requirements such as the preparation of an erosion control plan to reduce the effects of sedimentation and erosion. Project construction would also comply with LAMC Section 64.70. Under LAMC Section 64.70, the discharge of pollutants into the stormwater system would be prohibited during construction. Further, Project construction would occur in accordance with the specific minimum construction BMP requirements as outlined in the City of Los Angeles *Development Best Management Practices Handbook, Part A Construction Activities,* 3rd Edition.

Therefore, adherence to Federal, State and regional regulations through the implementation of BMPs as part of the SWPPP and NPDES permitting process would ensure that construction impacts with respect to stormwater are less than significant. Nevertheless, mitigation measures are identified below to further reduce construction impacts to stormwater flows.

(b) General Dewatering Permit

Dewatering is not anticipated to be required in any of the grading areas. However, should dewatering be required, discharges from any temporary dewatering operations associated with construction activities would be covered under a NPDES General Dewatering Permit, which authorizes such construction-related activities so long as all conditions of the permit are fulfilled. Compliance with the requirements of the General Dewatering Permit is used as one method to evaluate a proposed project's construction-

related impacts on surface water quality. Prior to construction, the Applicant would be required to obtain a General Construction Permit from the LARWQCB. Based on the foregoing considerations, if any dewatering activities are planned to occur, compliance with the Waste Discharge Requirements in the dewatering general permit and final design of the dewatering system to minimize any off-site influence to groundwater, would ensure potential impacts associated with dewatering operations on groundwater quality are less than significant.

(2) Operation

(a) Hydrologic Volumes (Runoff)

The proposed Project's grading operations would not change the total area of Drainage Area A. As such, Drainage Area A, of which all stormwater flows into Drainage Line L, would continue to encompass approximately 180 acres. Following implementation of the proposed Project, Drainage Area A would produce a 50-year burned flow rate of approximately 336.5 cubic feet per second (cfs). The "burned flow rate" measures the stormwater flow rates of a drainage area that has experienced a fire event. Fire events tend to accelerate stormwater flows because they reduce the overall amount of vegetation in an area and destabilize soils. To accommodate this stormwater flow, three debris basins would be provided within this area. The debris basin volumes provided for the lower, middle, and upper reaches of Drainage L are 2.3 acre-feet, 2.0 acre-feet, and 5.7 acre-feet, respectively. The required basin volumes are 1.7 acre-feet, 1.7 acre-feet, and 4.6 acre-feet, respectively. The upper basin is designed to handle both debris and detention. Since the allowable peak discharge within this area is approximately 1.4 cfs per acre, the maximum flow rate allowed downstream into the Los Angeles River is approximately 252 cfs. Thus, approximately 84 cfs would be detained in the upper basin. The combined debris and detention basin is contingent upon City approval.

While the majority of stormwater flows in Drainage Area A would pass through one of the Project's proposed debris basins, a small portion of the stormwater flows would directly enter Drainage L. As such, these flows would still contain debris that would otherwise be removed by one the proposed debris basins. When stormwater flows contain debris, it increases the overall total volume of the stormwater flows. Stormwater flows containing debris are known as "bulk flows". The total burned and bulked flow rate for Drainage Area A would be approximately 369 cfs.

Similar to Drainage Area A, the proposed Project's grading operations would not change the total area of Drainage Area B. As such, Drainage Area B would continue to encompass approximately 700 acres. Following implementation of the proposed Project, Drainage Area B would and produce a 50-year burned flow rate of approximately 1,086 cfs. All stormwater in Drainage Area B flows into Sennett Creek. Rip rap would be provided at

outlet points within Drainage Area B where stormwater enters Sennett Creek to reduce to reduce the water velocities from the proposed outlets. To accommodate stormwater flows in Drainage Area B, six debris basins are proposed (Basin J, Basin I, Basin H, Basin F, Basin D, and Basin B), which are located along the southern Project boundary to collect debris from the hillside south of the Project Site. The basin volumes required respectively are 0.8, 1.0, 5.5, 2.5, 3.9, and 0.3 acre-feet. The use of elevated inlets and/or de silting inlets may be allowed for this area and is contingent upon City approval.

As with Drainage Area A, a portion of the stormwater flows in Drainage Area B would not pass through one of the Project's proposed debris basins before entering Sennett Creek and would therefore still contain debris. The additional flows generated from the areas tributary to Sennett Creek (located towards the east) have been calculated as bulk flows, since no debris basins were provided for these areas. The 50-year bulked flow rate for Areas B is approximately 1,237 cfs.

The proposed Project would upgrade 17 storm drain systems (68 segments) within the Project Site. Storm drains would be sized with sufficient hydraulic capacity to accommodate the design hydrology and would be installed under private roadways within the Memorial Park for ease of maintenance. Further, the proposed Project would also include the development of debris basins in Drainage Areas A and B to retain debris and reduce the overall total volume of stormwater flows. Pursuant to Mitigation Measure G-13 below, the new on-site storm drain system and debris basins would be maintained and operated by Forest Lawn Memorial-Park Association upon completion of construction.

These 17 storm drain systems were analyzed to determine if their capacity would be sufficient to accommodate the proposed Project's stormwater flows. Based on post-development hydrology calculations, the design runoff would be managed so as not to exceed the recommended and allowable runoff flows determined by the Los Angeles County Department of Public Works. Please refer to Appendix G, Hydrology Analysis, for detailed calculations of the proposed Project's calculated drainage capacities. Therefore, Project impacts related to surface water runoff and flooding would be less than significant.

(b) Surface Water Quality

In connection with the proposed Project approximately 147 acres would be graded within the southern, eastern and westernmost areas of the Project Site, as shown in Figure II-9, Grading and Roadway Calculation Plan in Section II, Project Description, of this Draft EIR. Paved and developed areas contribute substantially greater quantities of water to the storm drain system than pervious landscaped areas. The proposed Project would convert approximately 94 acres of currently undeveloped area to developed area with interment area and would include approximately 16 acres of new roadway and non-interment building area. The remaining approximately 36 acres of graded areas would be improved as

undevelopable slope and drainage/basin areas. As such, the Project has the potential to adversely affect the quality of stormwater runoff. The quality of stormwater is generally affected by the length of time since the last rainfall, rainfall intensity, land use in the area, and quantity of transported sediment. Street and parking lot surfaces are the primary source of stormwater pollution in urban areas. Stormwater runoff from parking lots has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system. As such, new developments are required to be designed so as to reduce water pollution to the Maximum Extent Practicable. The various operational control PDFs discussed in Section IV.G., Hydrology/Water Quality would reduce the volume of dry weather runoff, and treatment control PDFs would capture and treat the dry weather runoff that may occur. Implementation of these PDFs including Site Design, Source Control, and Treatment Control Best Management Practices would ensure that potential impacts to surface water quality would be less than significant.

b. Cumulative Impacts

For purposes of assessing the proposed Project's impacts to flooding, the geographic limits of the area of potential affect are defined within the 930-acre Hydrologic Drainage Area. The Project's Hydrologic Drainage Area is mostly undeveloped with steep slopes, vegetated hillsides, and in some areas recently burned areas. The volume of surface water runoff from the area is affected by existing vegetation, on-site developed drainages and BMPs. Future development within the Project's affected Hydrologic Drainage Area is not anticipated beyond that associated with the proposed Project as the adjacent areas outside the Project Site to the south and east are designated as natural parkland within Griffith Park. Based on preliminary post-development hydrology calculations, the design runoff within the hydrologic drainage area would be managed to not exceed the recommended and allowable runoff flows determined by the Los Angeles County Department of Public Works. Therefore, the Project's cumulative impacts related to surface water runoff and flooding would be less than significant.

For purposes of assessing the proposed Project's impacts to surface water quality, the geographic limits of the area of potential affect include the receiving waters of on-site tributaries, Sennett Creek and the Los Angeles River Flood Control Channel. As discussed previously, the anticipated quality of effluent expected from the Project Site would not contribute loads or concentrations of pollutants of concern that would be expected to cause or contribute to a violation of the water quality standards in the Project's receiving waters. In addition, the Project's compliance with the Standard Urban Stormwater Mitigation Program requirements and implementation of the BMP measures would ensure the project is in compliance with the TMDL requirements for the Los Angeles River Channel watershed. Therefore, with compliance with all applicable laws, rules and regulations, no significant cumulative impacts to surface water quality are anticipated.

c. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to stormwater runoff during both construction and operation. Nonetheless, the following measures are recommended to further reduce any potential impacts:

(1) Construction

Mitigation Measure G-1 All waste shall be disposed of properly. Non recyclable materials/wastes shall be taken to an appropriate landfill. Toxic wastes shall be properly characterized and disposed at a licensed regulated disposal site.

Mitigation Measure G-2 Leaks, drips and spills shall be cleaned immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.

Mitigation Measure G-3 Hosing down of pavement at material spills shall be prohibited. Dry cleanup methods shall be used whenever possible.

Mitigation Measure G-4 Dumpsters shall be covered and maintained. Uncovered dumpsters shall be placed under a roof or covered with tarps or plastic sheeting.

Mitigation Measure G-5 Gravel approaches shall be used where truck traffic is frequent to reduce soil compaction and limit the tracking of sediment into streets.

Mitigation Measure G-6 All vehicle/equipment maintenance, repair, and washing shall be conducted away from storm drains. All major repairs shall be conducted off-site. Drip pans or drop clothes shall be used to catch drips and spills.

(2) Operation

Mitigation Measure G-7 The proposed Project shall implement stormwater BMPs to retain or treat the runoff from a storm event. The design of structural best-management practices (BMPs) in all new construction areas shall be to the satisfaction of the City.

Mitigation Measure G-8 The proposed Project shall be designed such that post development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate. A signed certificate from a California licensed civil engineer to confirm that the proposed Project is designed in such a manner shall be required.

Mitigation Measure G-9 Appropriate erosion control and drainage devices such as interceptor terraces, berms, vee-channels, and inlet and

outlet structures shall be incorporated in all new construction areas. Outlets of culverts, conduits or channels shall be protected from erosion by discharge velocities by installing rock outlet protection. (Rock outlet protection is a physical device composed of rock, grouted riprap, or concrete rubble placed at the outlet of a pipe.)

Mitigation Measure G-10 Potentially hazardous materials with the potential to contaminate stormwater shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

Mitigation Measure G-11 Storage areas for hazardous materials shall be paved and sufficiently impervious to contain leaks and spills.

Mitigation Measure G-12 Storage areas for hazardous materials shall have a roof or awning to minimize collection of stormwater within the secondary containment area.

Mitigation Measure G-13 The Project Applicant shall maintain and operate the new on-site storm drain system and debris basins.

d. Level of Significance After Mitigation

As discussed above, the proposed Project would not violate any water quality standards or waste discharge requirements, and would not otherwise substantially degrade water quality. Implementation of the PDF's identified in Section IV.G., Hydrology/Water Quality would ensure that the proposed Project is designed and developed in a manner that ensures water quality standards are met. The above proposed mitigation measures would further reduce these less than significant impacts.

The proposed Project's impacts to hydrology and water quality, including waste discharge requirements, groundwater supplies, groundwater recharge, drainage patterns, flood hazard and flood water flows, and stormwater drainage systems, would therefore be less than significant.

H. Land Use

a. Environmental Impacts

(1) Consistency with Land Use Policies and Regulations

(a) City of Los Angeles General Plan Land Use Element - Hollywood Community Plan

The Hollywood Community Plan includes several policies which are generally applicable to the proposed Project. The proposed Project would be consistent with all

applicable Hollywood Community Plan policies. Therefore, land use consistency impacts with respect to the Hollywood Community Plan would be less than significant.

(b) City of Los Angeles General Plan Elements

The City of Los Angeles General Plan includes several other Elements which contain policies that are generally applicable to the proposed Project. These include the Conservation, Open Space, Transportation, Safety, and Noise Elements. The proposed Project would be consistent with all Elements of the General Plan. Therefore, land use compatibility impacts with respect to the General Plan would be less than significant.

(c) Los Angeles River Revitalization Master Plan

The Los Angeles River Revitalization Master Plan is intended to improve the quality of the environment, water resources, and ecological functioning of the Los Angeles River. The proposed Project would further these goals by preserving and enhancing the flood control features of Drainage L and Sennett Creek. Importantly, the proposed flood control improvements to these contributing drainages would act to enhance both the flow rate and quality of tributary waters to the Los Angeles River through drainage improvements, application of best management practices, compliance with the National Pollution Discharge Elimination System permit requirements and other water quality improvement measures, thereby improving the flood control capability and ecological functioning of the Los Angeles River Flood Control Channel. As such, the proposed Project would be consistent with the goals of the Los Angeles River Revitalization Master Plan, and land use planning impacts would be less than significant.

(d) City of Los Angeles Planning and Zoning Code - Allowable Uses

The majority of the Project Site is currently zoned A1-1XL-H (agricultural zone), while a very small portion of the Project Site adjacent to Forest Lawn Drive is zoned RE40-1 (residential estate). While the proposed Project includes land within both zoning designations, the new internment sites and cemetery-related facilities under the proposed Project would be located entirely on land which is zoned A1-1XL-H, while the small portion of the Project Site zoned RE40-1 would continue to be used in its current state (i.e., ground interments). Permitted uses within the agricultural zone include one-family dwellings, parks, playgrounds, community centers, golf courses, truck gardening, extensive agricultural uses, and home occupations, while permitted uses in the residential estate zone include all those allowed in the agricultural zone, with the exception of golf courses and extensive agricultural uses, but also including accessory living quarters. However, Section 14.00, Public Benefit Projects, of the LAMC identifies cemeteries as a public benefit use permitted in any zone or location, unless otherwise restricted, so long as specific performance standards or approved alternative compliance measures are met. Therefore, because the LAMC would not otherwise restrict the proposed cemetery use at

this location, the proposed Project would be permitted on the Project Site (currently zoned A1-1XL-H and RE40-1) pursuant to Section 14.00, Public Benefit Projects, of the LAMC, provided that the specified performance standards (or approved alternate compliance measures specified in subsection B of Section 14.00) are met. The proposed Project would conform with each of the performance standards applicable to Public Benefit Projects, and would meet the stated purposes of these performance standards (as set forth in Section 14.00 A.1(b)) of the LAMC. With the approval of a Public Benefits Project for the proposed Project, the proposed cemetery use would be consistent with the zoning code.

The conceptual site plan for the proposed Project includes a 90-foot bell tower in the East Area, near the proposed outdoor chapel. The bell tower would be a non-occupiable architectural feature. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. To the extent that any proposed Project structures, such as the bell tower, exceed the height limitations imposed by the zoning code, the Project will include a request for either a variance or an alternative compliance measure pursuant to the public benefit provisions of the zoning code.

(e) Compass Blueprint Growth Vision

The proposed Project is located within a 2% Compass Growth Strategy opportunity area, and as such, would be subject to the Growth Vision's key principles. The Growth Vision's four key principles are: (1) Mobility, (2) Livability, (3) Prosperity, and (4) Sustainability. The specific components of these four key principles applicable to the Proposed Project are listed under the Livability and Sustainability Principles and include: (1) Support the preservation of stable, single-family neighborhoods; (2) Preserve rural, agricultural, recreational and environmentally sensitive areas; (3) Focus development in urban centers and existing cities; (4) Develop strategies to accommodate growth that use resources efficiently, and minimize pollution and waste; and (5) Use "green" development techniques. The Project would be consistent with these SCAG's Growth Visioning goals and impacts would be less than significant.

(f) 2008 Regional Transportation Plan

The 2008 RTP includes several goals which are generally applicable to the proposed Project. The proposed Project would be consistent and compatible with these goals and thus, impacts would be less than significant.

(2) Land Use Compatibility

(a) Construction Related Impacts

Construction of the proposed Project could cause temporary and intermittent affects on adjacent land uses due to temporary increases in air emissions (including fugitive dust), noise, and traffic congestion, as well as the use of heavy equipment for demolition, site grading and excavation, soil hauling, rock blasting and crushing, paving, and building fabrication. Construction activities could necessitate temporary lane closures on streets adjacent to the Project Site on a temporary and intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as may be required. However, site deliveries and the staging of all equipment and materials would be organized in the most efficient manner possible on-site to avoid impacts to the neighborhood and surrounding traffic circulation. These lane closures, and the associated traffic control plans necessary for such closures, would be reviewed and approved by the appropriate City agencies prior to any closure. Furthermore, as discussed in detail in Sections IV.B, Air Quality; IV.I, Noise; and IV.J, Traffic, Circulation, and Parking, of this Draft EIR, implementation of the recommended construction related mitigation measures pertaining to air quality, traffic and noise impacts would further reduce construction-related land use impacts upon adjacent land uses. Thus, land use impacts associated with construction of the proposed Project would be less than significant.

(b) Operational Impacts

The proposed Project would continue the cemetery-related uses on the Project Site, with no additional land area being added to the existing Memorial-Park boundaries. The Project Site is located within an area designated for open space land uses in the Hollywood Community Plan, and is consistent with the existing physical arrangement of properties within the vicinity of the Project Site, including Forest Lawn Drive, the Los Angeles River Flood Control Channel and the SR-134 Freeway to the north, Griffith Park and the Santa Monica Mountains to the south and east, contiguous undeveloped land owned by the Forest Lawn Memorial-Park Association to the west, and Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California Inc., to the north and northeast. The Project Site is buffered from both residential uses and studio office uses to the north by Forest Lawn Drive, the SR-134 Freeway and the Los Angeles River Flood Control Channel. In addition, a substantial portion of the Project Site's uses are not visible from off-site vantage points due to the topography of the immediate area. Moreover, as discussed in Section IV.A, Aesthetics, of this Draft EIR, the proposed Project's heights and building design would be generally consistent with what currently occurs on the Project Site and appropriate to the topography of the Project Site and surrounding area. While some building heights would increase with implementation of the proposed Project, new development would not present a contrast to the existing buildings of the Forest Lawn Memorial-Park - Hollywood Hills property or surrounding area. Within the current graded,

but undeveloped areas at the east and west ends of the Project Site, new development would represent a visual improvement as it would introduce buildings, landscaping, and open space area that would be consistent with existing on-site development. Thus, the proposed Project land uses would be compatible with those in the immediately adjacent and surrounding area. Access to the Project Site, which is not visible from most locations in the surrounding community due to topography, is available only from Forest Lawn Drive. The proposed Project would provide approximately 22,500 square feet of floor area for new structures, approximately 1,100,000 square feet of non-floor area, and approximately 200,000 new interment sites to meet the regional demand for interment and funeral services, thereby providing a public benefit use consistent with existing and surrounding land uses.

The proposed Project would not involve the permanent closure of any streets or sidewalks, and no separation of uses or disruption of access between land use types would occur. The proposed Project would be developed entirely within the existing boundaries of the Project Site. As such, it would not divide an established community. Rather, it would add new interment sites and cemetery-related structures, as well as renovate and expand existing structures and reception-related uses within the existing cemetery property. Overall, the proposed Project would be expected to better incorporate the Project Site into the surrounding community as approval of this Public Benefits Project requires that specific performance standards are met whose purpose is to ensure that the proposed land use would be consistent with the adjacent land uses (see Public Benefits Approval discussion under Environmental Setting). Therefore, potential impacts associated with land use compatibility would be less than significant.

b. Cumulative Impacts

Cumulative land use impacts could occur if other related projects in the vicinity of the proposed Project Site would result in land use incompatibility effects in conjunction with the impacts of the proposed Project. The proposed Project would implement important local and regional goals and policies for the Hollywood Community area, which would assist the City of Los Angeles in achieving short- and long-term planning goals and objectives. Future development associated with related projects would be subject to the same development standards as the proposed Project, specifically with respect to the Hollywood Community Plan, the Planning and Zoning Code, and other regional land use plans. Related projects outside of the Hollywood Community Plan would be required to follow the development standards of the respective Community Plan and/or any other such applicable plans under whose jurisdiction they rest. Conformance with these standards would ensure that related development would not result in incompatible land uses. Therefore, no significant cumulative land use impacts are anticipated.

c. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts with respect to land use. Therefore, no mitigation measures are required.

d. Level of Significance After Mitigation

The proposed Project would have a less than significant impact with consistency with land use policies and plans and land use compatibility. Thus, no mitigation measures are required.

I. Noise

a. Environmental Impacts

(1) Construction Noise

The Project would require the use of heavy equipment for demolition, site grading and excavation, soil hauling, rock blasting and crushing, paving, and building fabrication during both the initial construction period, and through the long-term implementation of the Project through the year 2050 and beyond. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity throughout the east, central, and western phasing areas on the Project Site. The haul routes that would be used by haul and delivery trucks during construction and operation would access the Project Site from Forest Lawn Drive and also access the SR-134 Freeway directly from Forest Lawn Drive. The haul route would not include use of the westernmost entrance to the Project Site along Forest Lawn Drive.

The grading and excavation stage would generate construction noise levels of approximately 86 dBA (L_{eq}). Construction of building structures would generate noise levels that would range from approximately 77 dBA (L_{eq}) during the foundation stage to approximately 83 dBA (L_{eq}) during the structural stage. In addition, during the finishing stage, noise levels of approximately 86 dBA (L_{eq}) would be generated. Since the majority of the Project-related construction would involve site grading, the maximum reference noise level of 86 dBA (L_{eq}) at 50 feet distance was used to provide a conservative analysis of Project impacts. The construction noise levels were calculated for five off-site receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance. With this attenuation rate, noise levels would diminish rapidly with distance from the construction site. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would be reduced to 78 dBA L_{eq}

at 100 feet from the source to the receptor, and would be reduced by another 6 dBA L_{eq} to 72 dBA L_{eq} at 200 feet from the source to the receptor.

Receptor location 1 is not specifically considered a noise-sensitive receptor by the *City of Los Angeles CEQA Thresholds Guide*. However, a noise analysis was performed for informational purposes to determine the estimated construction-related noise levels at this receptor. The estimated Project-related construction noise levels at receptor location 1 would range from approximately 53.6 dBA to 62.5 dBA. Thus, construction noise associated with the Project would increase noise levels at this location by up to 5.5 dBA when construction activities occur at the nearest possible location to this receptor.

The highest noise levels at receptor locations 2 and 5, which represent the nearby trails in Griffith Park, would be up to approximately 74 and 56.2 dBA, respectively. These Project-related noise levels would result in an increase in ambient noise levels of up to 25.4 and 8.4, dBA, at receptor locations 2 and 5, respectively, when construction activities occur at the nearest possible location to the receptor and based on the lowest measured existing ambient noise level. However, unlike other areas within Griffith Park, these trails within the park are used by visitors on a transitory basis. Thus, any impacts would be short-term and limited to the few moments a person would require to pass by this portion of the Project Site under construction. Thus, these short-term noise impacts on persons that utilize these trails would not be significant.

Construction related noise levels at receptor location 3 would range from approximately 47.3 dBA to 48.5 dBA. These noise levels would be well below the significance threshold of 65.3d BA established for this receptor location. Finally, at receptor location 4, the construction-related noise levels would range from approximately 59.2 dBA to 67.9 dBA and thus would exceed the significance threshold by up to 6.1 dBA when construction equipment is operating near the northwestern edge of the project site (approximately 400 feet to receptor location R4) during Phase 3 construction. The majority of the construction activities during Phase 3, however, would occur at a minimum of 800 feet from receptor location 4. At a distance of 800 feet, the construction noise level would be reduced by an additional minimum 6 dBA (due to distance loss alone), which would reduce the noise impacts to just under 1 dBA. With implementation of the proposed mitigation measures, construction noise levels would be reduced to a less than significant level.

In addition to on-site construction noise, haul and delivery trucks would access to the Project Site for export. The haul routes that would be used by haul and delivery trucks during construction and operation would access the Project Site from Forest Lawn Drive and also access the SR-134 Freeway directly from Forest Lawn Drive. The westernmost access to the Project Site from Forest Lawn Drive would not be used. There are no noise sensitive receptors (i.e., residential uses) along this haul route between the Project Site

and the freeway. In addition, truck movements would generate noise levels of up to 76 dBA at 50 feet from the roadway (FTA 2006). This noise level would be temporary as the trucks pass by and would diminish rapidly as the trucks travel away from the receptors. In addition, the residential uses located further to the north of the Project Site are also shielded from the haul routes by the existing sound wall along the north side of the SR-134 freeway. Therefore, significant noise impacts would not result from off-site construction haul and delivery trucks.

In summary, with the implementation of the mitigation measures identified below, the proposed Project would result in less than significant noise impacts associated with construction activities.

(2) Construction Vibration

Construction activities anticipated to occur on site that have the potential to generate low levels of groundborne vibration include demolition, excavation, and soil hauling. Vibration levels could reach as high as approximately 87 VdB within 25 feet of the Project Site from the operation of construction equipment.

The FTA has established groundborne vibration thresholds for buildings where vibration would interfere with interior operations, residences and buildings where people normally sleep and institutional land uses with primarily daytime use. These thresholds for human annoyance range from 65 to 75 VdB.

Construction vibration impacts are based on the instantaneous peak vibration level produced by the highest vibration producing piece of equipment. The estimated vibration levels due to Project construction equipment at the five receptors would range from 21.7 to 59.9 VdB. Thus, the vibration level that would be experienced by these receptors would not exceed FTA human annoyance vibration impact thresholds. Furthermore, there are no structures present at receptor locations 2 and 5 and use of these locations by visitors is transitory and short-term. In addition, other nearby commercial uses, including the studio uses approximately 400 feet to the west would not experience vibration levels above 50.9 VdB, which would be well below the 65 VdB criteria for studio uses. Thus, potential construction-related vibration impacts associated with human annoyance would be less than significant.

With regard to potential impacts associated with structural damage, the estimated Project PPV vibration levels associated with construction equipment would be well below the FTA's structural damage threshold vibration impact threshold of 0.12 inch-per-second PPV, assuming all structures are deemed "fragile," which is a conservative assumption. Thus, potential impacts associated with the potential for structural damage during construction activities would be less than significant.

(3) Operation Noise

With regard to potential operational noise impacts, implementation of the Project would not change the various types of activities that occur within the site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, the resulting roadway noise levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational noise would not exceed significance thresholds. Thus, potential impacts associated with operational noise would be less than significant.

(4) Operation Vibration

With regard to potential operational vibration impacts associated with human annoyance, implementation of the Project would not change the various types of activities that occur within the Project Site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, the resulting roadway vibration levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational vibration impacts associated with human annoyance would not exceed significance thresholds. Thus, potential impacts would be less than significant.

With regard to potential operational vibration impacts associated with building damage, implementation of the Project would not change the various types of activities that occur within the Project Site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, the resulting roadway vibration levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational vibration impacts associated with building damage would not exceed the significance thresholds. Thus, potential impacts would be less than significant.

(5) Construction Blasting

In addition to the conventional excavation process that requires using heavy earth moving equipment, controlled blasting would be required in areas of non-rippable rock. Blasting utilizes explosives to break the rock formation. When a blast is detonated, part of the energy is consumed in breaking up and moving the rock. The remaining energy is dissipated in the form of seismic waves expanding rapidly outward from the blast area, either through the ground (as vibrations) or through the air (referred to as air overpressure or an airblast). The vibration and airblast generated by blasting are typically of short-duration (i.e., less than a few seconds). It is anticipated that there would be one controlled blasting event per day for approximately 50 days during proposed construction.

The airblast levels were calculated based on procedures provided by Caltrans and using specific data from prior blasting activities conducted by the Applicant. Based on this data, charge weights of 3.5 to 165 pounds per delay have previously been used. The amount of charge weight ultimately used generally depends on the rock characteristics and varies from site to site. Thus, to provide a conservative analysis, a charge weight of 165 pounds per delay was used for the noise and vibration analysis associated with controlled blasting activities, with the exception of blasting within the East Area (Phase 2) near the receptor location 2, where a maximum charge weight of 65 pounds per delay would be used at a distance of 600 feet from the receptor with charge weights increasing based on distance from the receptor.

The estimated airblast levels at all five off-site receptor locations would be below both the human annoyance and building damage significance thresholds for all three construction phases. Thus, potential airblast impacts would be less than significant.

The blast-induced ground vibration levels were calculated using Caltrans' published vibration prediction procedure, which is based on blasting charge weights and the lateral distance to the affected receptors. Similar to the air overpressure analysis, a maximum charge weight of 165 pounds per delay was used for the vibration analysis to provide a conservative analysis, with the exception of controlled blasting at the East Area (Phase 2) near receptor location 2. A maximum charge weight of 65 pounds per delay was used to calculate the ground vibration levels from the controlled blasting at the East Area to receptor location 2. Furthermore, a vibration factor (i.e., K factor; see calculation sheets placed in Appendix H for detailed information) of 242, which represents the upper bound of the calculation (resulting in a higher level) was also conservatively used to account for various variables in the blast design and site-specific geology. As described in detail in Section IV.I., Noise, the estimated ground vibration generated by construction-related blasting would be well below both the human annoyance and building damage threshold at all off-site receptor locations. Thus, potential vibration impacts associated with blasting would be less than significant.

b. Cumulative Impacts

Future construction in the vicinity of the Project Site is not expected to result in a cumulatively considerable impact in terms of substantial temporary or periodic increases in ambient noise levels. Noise impacts are localized in nature and decrease substantially with distance. As shown in Figure III-1 in Section III, Environmental Setting, related projects in the immediate site vicinity include two City infrastructure projects proposed to the north of the Project Site and the Griffith Park Master Plan that is intended to provide for the ongoing maintenance and improvements within Griffith Park to the south and east of the Project Site. Based on the estimated timeframe of construction for the Project, it is possible that that these related projects could have the potential to affect the same surrounding uses as

does the Project. However, no Project construction activities would occur in close proximity to occupied residences, which are located at least 800 feet away, on the other side of the Los Angeles River Flood Control Channel in Burbank. In addition, a mitigation measure has been proposed to reduce Project-related noise impacts from construction activities to less than significant levels. In addition, Project-related haul trucks would not utilize the westernmost entrance to the Project Site. Thus, Project-related haul trucks would not pass by nearby residential areas and no cumulative impacts associated with the proposed haul route would occur. Based on the above, the contribution of the Project to potential cumulative construction impacts would not be cumulatively considerable.

Implementation of the Project would not change the various types of activities that occur within the Project Site. In addition, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, operation of the Project would not generate a substantial increase in noise and vibration levels. In addition, due to their distance from the Project Site and the types of uses proposed, the related projects are not anticipated to generate a substantial increase in noise levels within the vicinity of the Project Site. Accordingly, long-term operational noise and vibration impacts would not be cumulatively considerable.

c. Mitigation Measures

Mitigation Measure I-1 The Applicant shall ensure all construction equipment engines be properly tuned and muffled according to manufacturers' specifications.

Mitigation Measure I-2 The Applicant shall ensure noise construction activities whose specific location on the site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) would be conducted as far as possible from the nearest noise-sensitive land uses, and natural and/or manmade barriers (e.g., intervening construction trailers) shall be used to screen such activities from these land uses to the maximum extent possible.

Mitigation Measure I-3 The Applicant shall ensure an informational sign be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive noise levels. Any reasonable complaints shall be recorded and addressed by the Applicant.

Mitigation Measure I-4 During Phase 3 (West Area) construction, when construction activities occur within less than 1,000 feet of receptor location 4, a temporary noise barrier of a maximum of 8 feet shall be placed at the boundary of the active construction areas facing

receptor location 4. The noise barrier shall block the line-of-sight between the off-site receptor and the construction equipment and shall provide a minimum 7 dBA noise reduction at receptor location 4.

d. Level of Significance After Mitigation

With implementation of the mitigation measures provided above, construction-related noise impacts would be less than significant. As discussed above, construction-related vibration impacts would be less than significant and no mitigation measures would be required. In addition, operation of the Project would not result in any significant impacts associated with noise or vibration. Thus, no mitigation measures would be required.

J. Traffic, Circulation, and Parking

a. Environmental Impacts

(1) Construction

Project construction-related traffic would consist of construction equipment, including haul trucks, and construction employee vehicles. All construction equipment would be staged on-site, and all construction employees would park on-site. The Project will include a request for a haul route permit to export approximately 713,000 cubic yards of soil from the Project The Project also includes a request for a second haul route permit for the export of approximately 400,000 cubic yards of soil from the Project Site in connection with grave preparation over the life of the Project (i.e., through 2050 and beyond).

All construction activities would be performed in accordance with all applicable state and federal laws and City Codes and policies with respect to building construction and activities, including the Department of Building and Safety's "Good Neighbor Construction Practices" as necessary and applicable to minimizing construction related impact on the surrounding community. These practices include parking construction vehicles on-site to prevent congestion, using flag persons and warning signs during haul truck entry/exit from the construction site, avoiding street closures during peak traffic hours, properly filling concrete trucks during deliveries, eliminating unnecessary noise (e.g., music) during construction, cleaning construction debris from public rights-of-way, eliminating conflicts with City trash pick-up schedules/operations, and obtaining permits when storing building materials in the public right-of-way. As provided in Sections 112.03 and 41.40 of the LAMC, the permissible hours of construction are 7:00 A.M. to 9:00 P.M., Monday through Friday, and between 8:00 A.M. and 6:00 P.M. on any Saturday or national holiday. No construction activities are permitted on Sundays. Project construction is expected to occur on an average of 22 active construction days per month.

Given the size and relative isolation of the Project Site, as well as the Project Site's proximity to the SR 134 Freeway, the combination of haul truck and employee traffic is not anticipated to cause any adverse impacts to intersection capacity, street segment capacity, freeway capacity, neighborhood intrusion, or parking during the construction period. While the sites receiving the removed soils have not been identified at this time, it is anticipated that all haul trucks would use the SR 134 Freeway and access the Project Site via the on- and off-ramps for Forest Lawn Drive. The haul route would not pass through a residential community and no schools are located along this route. Thus, construction related impacts to the surrounding land uses would be less-than significant. In addition, the proposed haul routes would be subject to conditions as deemed necessary by the City, including LADOT, Police Department, and the Planning Department to further reduce construction related impacts. Therefore, construction-related traffic impacts would be less than significant, and mitigation is not required.

(2) Operation

(a) Intersection Capacity, Street Segment Capacity, Freeway Capacity, and Neighborhood Intrusion Impacts

Available traffic count data indicates that the daily traffic volume on Forest Lawn Drive remained stable for the 7.5-year period ending in April 2007. The Project will provide approximately 200,000 additional interment sites. However, the level of daily interment activity is expected to continue to be stable over the life of the proposed Project, as it has been for over the last 13 years, due to existing logistical constraints at the facility (i.e., staffing and equipment needs, scheduling, and other logistical issues) that limit the number of services that can be held per day. By utilizing manual counts to calibrate and normalize the week-long machine counts, the existing average trip generation at the Project Site has been determined to be as follows:

- Approximately 2,990 trips per day.
- Approximately 109 trips (154 inbound and 46 outbound) during A.M. peak hour (between 7:00 and 10:00 a.m.).
- Approximately 259 trips (118 inbound and 283 outbound) during P.M. peak hour (between 3:00 and 6:00 p.m.).

The new interment sites will be developed and used within the undeveloped areas of the Project Site over an extended period of time, from 2011 to 2050 and beyond. Based on the stability in the number of interments that have occurred at the Forest Lawn Memorial-Park - Hollywood Hills property over the last decade, trip generation is expected to continue to be stable over the life of the Project. No additional growth in trip generation beyond current levels is anticipated. Accordingly, no increase in trip generation, including with the Project, is anticipated.

While no increase in trip generation would be expected to occur as a result of the Project, to be conservative, an analysis of potential trip generation employing appropriately conservative traffic growth assumptions has been provided.

(b) Project Traffic Generation

No increase in traffic generation is anticipated as a result of the Project. However, if any additional traffic were generated due to the Project, it would be negligible and very gradual. For purposes of a conservative analysis, it has been assumed that such growth might be as high as 1.0 percent over a five-year period. Applying this hypothetical increase to the existing Project Site trip generation every five years over the approximate 40-year buildout of the Project from 2011 to 2050, the resulting additional Project trip generation would be as follows:

- Project Daily Trips: 2,990 trips x (40 years ÷ 5 years) x 1.0 percent = 239 trips
- Project A.M. Peak Hour Trips : 109 trips x (40 years ÷ 5 years) x 1.0 percent = 9 trips
- Project P.M. Peak Hour Trips: 259 trips x (40 years ÷ 5 years) x 1.0 percent = 21 trips

Based on the C*ity of Los Angeles CEQA Thresholds Guide*, if a project generates less than 500 daily trips and less than 43 trips in the P.M. peak hour, there would be no significant impact on the street segment. The trip generation estimates for the Project are minor and well below the City's criteria for triggering project traffic studies. It should also be noted that the Project Site's weekday peak trip generation generally occurs between the off-peak traffic hours of 10:00 A.M. and 3:00 P.M., and does not impact traffic during the typical commute hours when traffic volumes are greater. This pattern is expected to continue with the Project.

Due to ongoing grave preparation activities, soil export from the Project Site is a regular occurrence under existing operations. The Project would continue the cemetery use of the existing Project Site; as such, the Project includes a request for a second haul route permit for the export of approximately 400,000 cubic yards of soil from the Project Site to accommodate grave preparation over the life of the Project. This soil export would be spread out over at least a 40-year period (i.e., through 2050 and beyond). Furthermore, the level of daily interment activity is expected to continue to be stable over the life of the Project. Therefore, soil export due to grave preparation during Project operation would not be anticipated to generate a significant increase in truck traffic.

(c) Intersection Capacity

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the vehicle to capacity (V/C) ratio at any of the intersections within the Project vicinity. Accordingly, impacts to intersection capacity would be less than significant, and mitigation is not required.

(d) Street Segment Capacity

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the V/C ratio on any of the street segments in the Project vicinity. Accordingly, impacts to street segment capacity would be less than significant, and mitigation is not required.

(e) Freeway Capacity

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the demand to capacity (D/C) ratio on any freeway segment or freeway on- or off-ramp. Accordingly, impacts to freeway capacity would be less than significant, and mitigation is not required.

(f) Neighborhood Intrusion

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to increase the average daily traffic volume on a local residential street. Accordingly, neighborhood intrusion impacts would be less than significant, and mitigation is not required.

(g) Project Site Access Impacts

The Project is not proposing to add new driveways on the streets bounding the Project Site and therefore would not impact site access. Additionally, the Project would not alter the overall internal circulation scheme within the Project Site. Access to the Project Site, including emergency access, would not change under the Project as compared to existing conditions. As noted above, the Project is not expected to result in increased traffic, including at the primary site access location at Memorial Drive, and no off-site roadway improvements are proposed. Therefore, impacts to Project Site access would be less than significant. Accordingly, mitigation is not required.

(h) Parking Impacts

There are approximately 600 parking spaces located on the Project Site within various surface parking lots. Approximately 200 surface parking spaces are located at the entrance of the Project Site surrounding the Administration/Flower/Mortuary Building and

Chapel and storage buildings. Approximately 150 surface parking spaces are located immediately adjacent to the Hall of Liberty building with another 250 spaces located at the top of Ascension Road. In addition to the marked surface parking areas, additional parking is available throughout the Project Site along the private roadway network internal to the Project Site. As such, ample parking is available within the Project Site to meet parking demands. Buildout of the proposed Project would increase on-street surface parking areas along the new private roadways internal to the Project Site. Surface parking areas would also be developed to accommodate the demands of new structures. As noted above, the proposed Project would not increase the average number of daily interments and would not measurable increase the demand for parking on the Project Site. As all of the Project's parking demands can be met on site, parking would not spill over onto adjacent roadways and thus would not have the potential to adversely affect neighboring properties. Therefore, the Project would not provide less parking than needed, and parking impacts would be less than significant. Accordingly, mitigation is not required.

b. Cumulative Impacts

Implementation of the Project in combination with the related development projects in the area would increase the amount of traffic in the region. As discussed above, the Project would generate negligible, if any, new trips. Because the Project's incremental contribution to the cumulative impact on traffic would be very minor (specifically, less than half of the 500-daily-trip threshold that triggers an expanded traffic analysis pursuant to the C*ity of Los Angeles CEQA Thresholds Guide*), it would not result in a significant cumulative effect. In addition, other development projects would be evaluated on a case-by-case basis and mitigation measures would be implemented individually in coordination with the City. The Project would not result in a significant impact related to accessibility, including emergency access. With respect to each of these areas, the design of each related development project would be evaluated individually in coordination with City, the Fire Department, and the Police Department to minimize any potential impacts. Overall the Project's cumulative traffic and circulation impacts would be less than significant.

c. Mitigation Measures

As summarized in this Section, the Project would not have the potential to result in significant traffic and circulation impacts, and as such, does not require further analysis in a traffic study. Therefore, mitigation measures are not required.

d. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in traffic to a point where the existing roadway infrastructure would be adversely affected based on LADOT

standards. As such, Project traffic, circulation, and parking impacts would be less than significant.

K.1 Utilities – Wastewater

a. Environmental Impacts

(1) Construction

No significant increase in wastewater flows from the Project Site is expected as a result of construction activities. It is anticipated that the existing connections to the wastewater lines along Forest Lawn Drive would be adequate to serve the proposed Project and that any upgrades to the wastewater infrastructure would be limited to on-site improvements. As such, the construction of wastewater infrastructure would most likely be localized to the Project Site and immediate vicinity. However, there is the potential that an improved or secondary sewer line could be required along Forest Lawn Drive. In the event that off-site sewer improvements are required, construction impacts (street, traffic detouring and control, and impacts to other utilities) would be limited to trenching for the sanitary sewer lines and would be temporary in nature. Where any utility line construction encroaches into public right-of-way, review and approval by LADOT would be required. As a result, a single lane of traffic in each direction, as well as access to the Project Site and surrounding properties, would be maintained at all times during construction. Therefore, Project construction would result in a less than significant impact with respect to the installation of wastewater conveyance infrastructure.

(2) Operation

(a) Wastewater System Facilities

The Project Site is located within the Hyperion Service Area (HSA), which includes the Hyperion Treatment Plant (HTP), the Tillman Water Reclamation Plant (TWRP), and the Los Angeles Glendale Water Reclamation Plant (LAGWRP). Wastewater generated at the Project Site is processed at the HTP.

The HTP currently processes average wastewater flows of approximately 362 million gallons per day, resulting in a remaining capacity of approximately 88 million gallons per day (gpd). The proposed Project would result in a net increase in wastewater flows of approximately 4,815 gpd, which represents only approximately 0.004 percent of the total remaining capacity at the HTP. When added to the existing baseline on-site wastewater generation of approximately 23,031 gpd, the proposed Project's total on-site wastewater generation would be approximately 27,846 gpd. As such, the proposed Project's total wastewater flow, at build-out when combined with existing cemetery development, represents only approximately 0.03 percent of the total remaining capacity at the HTP.

As such, the proposed Project would not substantially or incrementally exceed the future scheduled capacity of the HTP by generating flows greater than those anticipated in the Integrated Resource Plan (IRP). The estimated increase in flow that would be generated from the proposed Project would be adequately served by the HTP, which has sufficient capacity to serve the Project. Thus, the proposed Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP and impacts would be less than significant and no mitigation measures are required.

(b) Local Wastewater Conveyance Infrastructure

The proposed Project's development of approximately 22,500 square feet of occupied floor area could result in an increased demand on wastewater services. The increase of 1.1 million square feet of non-occupied floor area for mausoleum, columbaria, crypts, and garden areas would not generate any sewer flows and thus would not place any additional demands upon the City's wastewater service system. The City of Los Angeles Bureau of Sanitation, Wastewater Engineering Services Division conducted a preliminary evaluation of the potential impacts to the wastewater system for the proposed Project.

The Project Site connects to the public wastewater system within a sewer easement running under Memorial Drive at the northern end of the Project Site (i.e., the Forest Lawn Memorial-Park - Hollywood Hills property main entrance) where the private on-site wastewater line connects to an existing 8-inch public line under Forest Lawn Drive. Wastewater flows are then directed eastward and are conveyed to a 48-inch line in Buena Vista Street, then into a 60-inch line and 48-inch line in the Riverside Drive right-of-way. Wastewater flows then feed into the Mariposa Siphon, before being discharged into a 48-inch line in the Forest Lawn Drive right-of-way. This line, together with the larger network of sewage infrastructure, conveys Project Site wastewater flows to the HTP.

The current depth to diameter ratios in the 8-inch and 48-inch lines in Buena Vista Street and the Riverside Drive right-of-way and the 60-inch line that serve the Project Site cannot be determined at this time. However, existing gauging information indicate that the 48-inch line on the Forest Lawn Drive right-of-way that serves the Project Site is approximately 25 percent full. Since the 48-inch line is currently 25 percent full and is designed to accommodate 30.78 million gpd, the proposed Project's 27,846 gpd would represent 0.09 percent of the remaining capacity of the 48-inch line. As such, there is sufficient capacity in the 48-inch line in Forest Lawn Drive to accommodate the Project's increased wastewater flows.

While the current remaining capacity of the wastewater lines that flow into the 48-inch line on Forest Lawn Drive cannot be determined at this time, before the Department of Building and Safety formally accepts a set of plans and specifications for a

project for plan check, the Los Angeles Department of Public Works (LADPW) must first determine if there is allotted sewer capacity available for the Project. In addition, the City would require the approval of a sewer permit prior to the construction of the proposed Project. In the event that during the permitting and development process, wastewater lines are found to contain insufficient capacity, be substandard, or in deteriorated condition, a larger sewer line or a secondary sewer line would be necessary to connect to the nearest larger sewer line with sufficient capacity. Should a larger or secondary line be required at a future date, the Applicant would be required by City regulations to make necessary improvements to achieve adequate service in consultation with the LADPW Bureau of Sanitation. The design of these wastewater lines would be developed by a registered engineer and approved by the City. As a result, the issuance of all applicable building permits would ensure that adequate sewer capacity is available prior to the start of construction.

As such, the proposed Project is not anticipated to cause a substantial increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Impacts upon the local wastewater infrastructure system would therefore be considered less than significant and no mitigation measures are required.

(c) Consistency with General Plan and IRP

The proposed Project would be consistent with both the Hollywood Community Plan and all elements of the General Plan. As such, the proposed Project's wastewater generation would be consistent with the proposed land uses and wastewater generation envisioned under the General Plan and incorporated into the IRP.

While the proposed Project would extend beyond the planning timeframe (2020) of the IRP, it is assumed that future IRPs would be prepared and adopted, and the same conservation measures and infrastructure improvements, or yet other unknown factors, would extend wastewater treatment capacity to 2050 and beyond. When considering the IRP forecast, it is important to note that the previous IRP forecasted the HTP reaching capacity at a much earlier date. Increased water conservation efforts and reduced population forecasts are the factors that caused the date HTP capacity is reached to be extended further into the future. Further, it is important to consider that the proposed Project's net increase in wastewater generation of 4,815 gpd would be a negligible portion of the overall future increase in wastewater flows within the HSA.

As a result, the proposed Project would be consistent with the policies regarding wastewater set forth in the City's General Plan and the IRP and a less than significant impact would result. No mitigation measures are required.

b. Cumulative Impacts

It is anticipated that the proposed Project, in conjunction with other expected growth within the area served by the HTP, will result in cumulative increases in wastewater generation. However, future increases in wastewater flows throughout the HSA are addressed in the IRP, has determined that existing wastewater processing facilities are sufficient to handle projected flows through 2020. Further, the IRP provides for development of additional wastewater treatment infrastructure projects if triggered by an increase in population (beyond what is projected), regulations, and/or groundwater replenishment needs. These "go-if-triggered" projects include the potential expansion and upgrade of the Tillman Wastewater Reclamation Plant to accommodate up to 100 million gpd of wastewater. If expansion of existing facilities is required, the environmental impacts of this activity already have been addressed in the Draft and Final EIRs prepared for the IRP, which is hereby incorporated by reference.

Cumulative wastewater impacts of the proposed Project and expected growth through the year 2020 would be accommodated by facilities and improvements envisioned by the IRP. The proposed Project's contribution to cumulative wastewater generation would not be individually or cumulatively significant; it is not growth inducing and (based on the Project's consistency with the existing General Plan and zoning) it was included in the growth projections that were used as the basis for the IRP. Further, the proposed Project's net increase in wastewater flows is negligible when considering the overall wastewater flows within the local sewer infrastructure and within the HSA. While cumulative increases in wastewater generation would be accommodated by facilities and improvements identified in the IRP, future growth beyond the timeframe of the IRP (i.e., beyond 2020) has not been identified, and is not foreseeable. As such, the analysis of cumulative impacts related to wastewater treatment capacity relies on the IRP and its conclusions.

c. Mitigation Measures

As discussed above, the proposed Project's impacts to the wastewater infrastructure would be less than significant without mitigation. Nonetheless, the following mitigation measure is provided to reduce wastewater generation within the Project Site:

Mitigation Measure K.1-1: Any new structures that include restrooms shall include the following features, as applicable:

- High-efficiency toilets (maximum 1.28 gpf), including dual-flush water closets, and high-efficiency urinals (maximum 0.5 gpf), including no-flush or waterless urinals.
- Restroom faucets with a maximum flow rate of 1.5 gallons per minute.

- Restroom faucets shall be of a self-closing design.

d. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Potential impacts upon the local wastewater infrastructure system would therefore be less than significant and no mitigation measures are required.

The Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP. Project impacts upon the service capacity of the HTP would be less than significant and no mitigation measures are required.

K.2 Public Utilities – Water

a. Environmental Impacts

(1) Construction

No significant increase in water demand is anticipated as a result of the Project's construction activities. The construction of the Project would include all necessary on- and off-site water pipe improvements and connections to adequately link the Project to the existing LADWP water systems. The LADWP is designing a potable water trunk line to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure. As such, it is anticipated that the only off-site improvements to the water delivery infrastructure would be those necessary to connect the on-site water delivery system to the new water main. During this connection, Project construction impacts (street, traffic detouring and control, and impacts to other utilities) would be confined to trenching for the connector water main and physically establishing the connection to the water main. The proposed Project's construction impacts relative to vehicular and pedestrian access associated with the installation of the proposed new connection lines would be temporary and would cease upon completion of the connection to the LADWP water main. Additionally, although the installation of this connection line may require traffic lane closures, a single lane of traffic in each direction, as well as access to the Project Site and surrounding properties, would be maintained at all times during construction. Therefore, Project construction would result in a less than significant impact with respect to the installation of the water delivery infrastructure.

(2) Domestic Water Demand

Implementation of the proposed Project would result in the development of approximately 22,500 square feet of new occupied floor area of cemetery-related land uses. Based on the derived demand rate on the site history for domestic water usage (approximately 214 gpd per 1,000 square feet), implementation of the proposed Project would result in an increased demand on domestic water supply services of approximately 4,815 gpd. This would represent an approximate 21 percent increase in the domestic water demand as compared to the estimated baseline conditions. A discussion of the proposed Project's increased demand for recycled water is found below. It is important to note that this analysis is conservative in that it does not take into account that when compared to the existing occupied floor area, the new occupied floor area would incorporate low-flow water fixtures, which would utilize less water. As such, the average daily demand would likely be less than presented above.

The proposed Project involves the expansion of an existing cemetery and does not involve the construction of any housing units or any other non-cemetery related uses. As such, the proposed Project is consistent with the underlying zoning designation of the Project Site and is consistent with the Southern California Association of Government's 2004 demographic projections, on which the 2005 (Urban Water Management Plan (UWMP) was based. As concluded in the 2005 UWMP, based on existing and potential water supplies from local groundwater basins, the Los Angeles Aqueduct (LAA) system, water purchased from the Metropolitan Water District (MWD), and other planned sources, as well as existing and planned conservation and reclaimed water efforts, LADWP expects to meet the potable water demands for the City of Los Angeles and its outlying service areas through the year 2030. Therefore, adequate water supply exists to serve the Project increased demands.

Pursuant to the requirements set forth in SB 610 and SB 221, the proposed Project does not include any of the types of development which are required to obtain a Water Supply Assessment. Further, the proposed Project does not include a shopping center, business establishment, or commercial office building, and does not include industrial, manufacturing, a processing plant or industrial park, and is not a mixed-use project. Therefore, a Water Supply Assessment is not required and a less than significant impact with respect to domestic water supplies would result.

Nevertheless, due to statewide drought conditions, the LADWP recommends that water should be conserved at all times, because efficient use of water allows increased water for use in dry years and makes water available for beneficial environmental uses. As such, the proposed Project would include the installation of recommended water conservation features, such as low-flow toilets, and urinals in all restroom areas. In addition, the use of recycled water for landscape irrigation would continue under the

proposed Project. As such, irrigation required for the Project's new landscaped areas would not increase the on-site demand for domestic water supplies.

(3) Recycled Water Demand

The proposed Project will result in an increased demand on recycled water supply for the maintenance and operation of the proposed Project. Based on the current use of recycled water across the Project Site, the irrigation demands for the property are approximately 3,000 gpd per acre. Under the proposed Project, the developed and landscaped areas of the Project Site would increase by approximately 94 acres, increasing the irrigation demands by approximately 282,000 gpd. Since the proposed Project would utilize reclaimed water for its irrigation needs, water demands for irrigation purposes would not place additional demands upon the City's domestic water supply and water demand impacts would be less than significant.

(4) Domestic and Recycled Water Infrastructure

The Applicant has existing on-site private potable and reclaimed water storage and pumping facilities. As an Interim Project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. This project was permitted in 2007 and is planned to be completed in early 2011. In addition, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. Until the new trunk line is installed and a connection provided to the Project Site, the Applicant will continue to receive water from the existing water distribution system and pressurize the water for distribution and use on-site. Water system upgrades in connection with the Project would expand the existing on-site private potable and reclaimed water systems to new areas of the cemetery as they are developed through the installation of new on-site domestic and recycled water lines and connections to existing lines. Nevertheless, pursuant to the Project's Design Features, the Project will include all necessary on-site improvements to the domestic and recycled water delivery infrastructure to ensure adequate water supply on the Project Site. As a result, the proposed Project's impacts to the local domestic and recycled water delivery infrastructure would be less than significant and no mitigation measures are required.

(5) Water Treatment Infrastructure

Domestic water to the Project Site is primarily provided by the Los Angeles Aqueduct Filtration Plant, which has the capacity to treat 600 million gallons per day from the Los Angeles Aqueducts. The average plant flow is approximately 450 million gallons per day during the non-summer months and 550 million gallons per day during the summer months, and thus operates at between 75 and 92 percent capacity. As such, even during

the summer months, the Los Angeles Aqueduct Filtration Plant has an excess capacity of 50 million gallons per day. In addition to the Los Angeles Aqueduct Filtration Plant, which receives water from the LAA, water within the North Hollywood area of the City of Los Angeles is also provided by the MWD. The MWD, which provided approximately two-thirds of the potable water demand for LADWP in 2009, treats its own water via three water filtration plants that it owns and operates. In addition, the North Hollywood Pump Station treats a small amount of groundwater for distribution throughout the Project Site vicinity. Collectively, these water treatment facilities are used to meet the potable water demand for the City. The proposed Project's net increase in potable water demand of 4,815 gpd represents less than 0.01 percent of the total treatment capacity of the Los Angeles Aqueduct Filtration Plant alone. Further, the Project's net increase in potable water demand also represents approximately 0.01 percent of the total remaining available capacity at the Los Angeles Aqueduct Filtration Plant during the peak summer months.

As such, the Los Angeles Aqueduct Filtration Plant has adequate available capacity to treat the domestic water needed for the proposed Project. Additionally, as indicated by the LADWP, the North Hollywood Pump Station is expected to have adequate capacity to accommodate the proposed Project's net increase in water consumption.[13] As such, LADWP treatment facilities would have adequate capacity to serve the net increase in domestic water demand under the proposed Project and no new or expanded water treatment plant facilities would be required. Furthermore, reclaimed water would continue to be used on landscaped portions of the Forest Lawn – Hollywood Hills property, reducing the demand for domestic water. Therefore, the proposed Project would result in a less than significant impact with respect to the potable water treatment infrastructure and no mitigation measures are required.

b. Cumulative Impacts

In terms of the City's overall water supply, the water demands for projects that are consistent with the City's General Plan have been taken into account in the 2005 UWMP. For projects that are not consistent with the General Plan or that meet the requirements established in Sections 10910-10915 of the State Water Code, a Water Supply Assessment demonstrating sufficient water availability exists to serve the project would be required on a project-by-project basis. LADWP's 2005 UWMP projects yearly water demand to reach 776,000 acre-feet by 2030, or an increase of 17 percent from 2005. Water demand projections in 5-year increments through 2030 are available in the 2005 UWMP for each of the major customer classes – namely single family, multi-family,

[13] *Letter correspondence from Charles C. Holloway, Manager of Environmental Assessment, Los Angeles Department of Water and Power, September 25, 2008.*

commercial, governmental, and industrial. Demographic data from the Southern California Association of Government's 2004 Regional Transportation Plan as well as billing information for each major customer class, weather, and conservation were factors used in forecasting future water demand growth. It is anticipated that the projected water supplies during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in its UWMP will meet the expected water demands associated with the proposed Project in addition to the demands of current and future related projects.

Additionally, the proposed Project's net increase potable water demand of 4,815 gpd represents less than 0.01 percent of the total treatment capacity and only 0.01 percent of the remaining available capacity of the Los Angeles Aqueduct Filtration Plant alone. Therefore, the Los Angeles Aqueduct Filtration Plant would have adequate capacity to treat the water demanded by the proposed Project and related projects. Further, the potential need for the related projects to upgrade water lines to accommodate their water needs is site-specific and there is little, if any, cumulative relationship between the development of the proposed Project and the related projects. Therefore, no cumulative water infrastructure impact or water treatment facilities impacts are anticipated from the development of the proposed Project and the related projects. Cumulative impacts to water service and regional supplies would be less than significant

c. Mitigation Measures

As discussed above, the proposed Project would result in less than significant impacts related to water supply and infrastructure. As such, no mitigation measures are required.

d. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in water demand to a point where the existing water delivery infrastructure or the available water supply would not be able to accommodate the proposed Project. As such, the potential impacts upon the local water delivery infrastructure and available supplies would therefore be less than significant and no mitigation measures are required.

K.3 Public Utilities – Energy

a. Environmental Impacts

(1) Construction

During the construction phase, existing electrical and natural gas service equipment would be relocated and reconfigured on-site as part of the overall site improvement plan.

Additional electrical conduits, wiring, and associated infrastructure would be installed. Infrastructure required for natural gas service would also be installed. All improvements to the electrical and natural gas infrastructure, including a potential new on-site electrical transformer, would occur on-site. No utility outages are expected when hooking up the proposed Project, but a short outage is possible. In the unlikely event that service disruption does occur, it would be for a short duration. No roadway closures or access restrictions would be required during the implementation of upgrades to the electricity or natural gas distribution systems. Therefore, utility impacts during the construction period would be less than significant.

(2) Operation – Electricity

Development of the proposed Project would increase the existing demand for electricity service from the Project Site. The proposed Project would continue to be served from the existing power grid. The estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt house (kWh) per year. It is important to note that this estimate is conservative in that it does not take into account the energy-efficient PDFs that would be incorporated into new on-site occupied buildings. These PDFs would require the Project to exceed Title 24 energy conservation requirements and require the Project to incorporate energy conservation measures that may include, but are not limited to: education on energy conservation; energy efficient lighting; use of solar panels; and/or participation in LADWP's Green Power Program. As the proposed Project does not qualify for recently adopted City of Los Angeles green building ordinance (Ordinance 179,820), Title 24's requirements are more stringent than those of the City of Los Angeles for a project of this nature. As such, the Project would incorporate energy conservation measures that go beyond City requirements. These PDFs are anticipated to reduce on-site electricity demand for new occupied buildings by at least 10 percent when compared to the electricity demand for current on-site buildings.

The LADWP delivered a total of 24,313.51 million kWh of electricity in 2006 and projects a long-term growth rate in electricity consumption of 1.4 percent, or 218.82 million kWh, per year. Based on this projection, overall LADWP electricity consumption would conservatively increase by approximately 8,752.8 million kWh between 2011 and 2050, the year of Project buildout. As such, the proposed Project's conservative net increase in electricity consumption of approximately 507,127 kWh represents a negligible increase (less than 0.01 percent) of the total LADWP projected increase in electricity consumption in the foreseeable future. Given the negligible net increase in on-site electricity demand in comparison to overall LADWP electricity generation, the LADWP would be anticipated to be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Therefore, the proposed Project would result in a less than significant impact with regard to electricity supplies and no mitigation measures are required.

Regarding electricity delivery infrastructure, some of the lines needed to serve the proposed Project, which will include cemetery development in areas of the Project Site that are currently undeveloped, currently do not exist. The LADWP already supplies existing loads to the Project Site though a transformer station located adjacent to, but outside of the Project Site. The additional load from proposed Project buildings, structures, and facilities may require the Project Applicant to provide for an on-site transformer station to supply both the new and existing load. As such, under the Project's PDFs, the Applicant would be responsible for the installation of required infrastructure improvements and associated pro-rata share financial contributions towards improvements needed to serve the proposed Project. Therefore, with the implementation of the Project's PDFs, Project impacts related to the electricity delivery infrastructure would be less than significant and no mitigation measures are required.

(3) Operation – Natural Gas

Implementation of the proposed Project would increase the demand for natural gas at the Project Site. Existing demand is approximately 5,325,417 cubic feet per year. When combined with the Interim Projects, the total baseline demand for natural gas would be approximately 5,796,197 cubic feet per year, or approximately 483,016 cubic feet per month. The proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,881 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,078 cubic feet per year, or approximately 836,673 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed.[14]

New lines connecting the main line to each of the proposed structures requiring natural gas service would be provided as needed during construction of each structure. As stated previously and stated in the Project's PDFs, all of the proposed buildings utilizing natural gas service would meet or exceed the State Energy Conservation Standards contained in Title 24 of the California Code of Regulations, which is a set of prescriptive standards establishing mandatory maximum energy consumption levels for buildings.

The Project would not require new (off-site) natural gas facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities and would incorporate

[14] *Letter correspondence from Mangione Mitchell, Planning Assistant, Southern California Gas Company, March 24, 2009.*

energy conservation measures that go beyond City requirements. Therefore, Project impacts related to natural gas supply and infrastructure would be less than significant.

b. Cumulative Impacts

Development of the proposed Project, in combination with related projects and projected population growth in the greater Los Angeles area not captured within the related projects list, could create an increased demand for electricity and natural gas supplied by the LADWP and the Southern California Gas Company, respectively. The cumulative effect of the proposed Project and other new and added loads may require near term and/or future additions to distribution system capacity. These cumulative effects may require the LADWP to construct additional distribution facilities.

All new development in California is required to be designed and constructed in conformance with State Building Energy Efficiency Standards outlined in Title 24 of the California Code of Regulations. It is possible that implementation of the related projects (and other development in the greater Los Angeles area) could require the removal of older structures that were not designed and constructed to conform with the more recent and stringent energy efficiency standards. Thus, it is possible that with implementation of some of the related projects and other development, the resulting demand for electricity and natural gas supply could be the same or less than the existing condition. Nonetheless, both LADWP and the Southern California Gas Company undertake expansion or modification of service infrastructure and distribution systems to serve future growth in the City as required in the normal process of providing electricity and natural gas service. Any potential cumulative impacts related to electricity and natural gas service would be addressed through this process. Therefore, cumulative impacts related to electricity and natural gas supply would be less than significant.

c. Mitigation Measures

As discussed above, the proposed Project's impacts to the electricity and natural gas infrastructure would be less than significant without mitigation. As such, no mitigation measures are required.

d. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in electricity or natural gas demand to a point where the existing water delivery infrastructure or the available supplies would not be able to accommodate the proposed Project. As such, the potential impacts upon the local electricity and natural gas delivery infrastructure and available supplies would therefore be less than significant and no mitigation measures were required.

K.4 Public Utilities – Solid Waste

a. Environmental Impacts

(1) Construction

Proposed construction is conservatively estimated to generate approximately 2,146 tons of construction debris over the construction life cycle of the proposed Project. Construction debris associated with the Project would primarily be classified as inert waste. The two primary unclassified landfills that serve the City of Los Angeles are the Azusa land Reclamation land fill and the Peck Road Gravel Pit. These two landfills have an estimated remaining capacity of 56.95 million tons based on the 2008 ColWMP Annual Report. Thus, disposal space in Los Angeles County is plentiful and the proposed Project would constitute a negligible portion of the overall total of disposal space for inert construction debris. Based on this data, it is concluded that there is no anticipated shortfall in disposal capacity for inert waste within the County. Conservatively assuming that none of the construction debris would be recycled, these facilities currently have adequate capacity to accommodate the Project's construction waste. Further a construction debris recycling plan shall be implemented during site preparation and building construction. Thus, the Project's construction waste impacts (excluding excavated soil material) would be less than significant.

The soil on the Project Site has been determined to be generally suitable for export to other locations in need of suitable fill material. As discussed in Section IV.F, Hazardous Materials/Risk of Upset, of this Draft EIR, any contaminated soil that is encountered and determined unsuitable for fill material would be handled in accordance with all applicable local, State, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste, based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. In any event, it is not anticipated that the 713,000 cubic yards of soil export during the initial construction period would be disposed of at an inert landfill. Rather, it is anticipated that the majority of this soil would be used as fill in other construction projects throughout the region where suitable fill material is required. Therefore, the proposed Project would not adversely impact the remaining available capacity at inert landfills.

(2) Operation

Upon completion, the proposed Project would result in a net increase of approximately 474 additional pounds (0.24 tons) of solid waste per day over existing conditions (Existing plus Interim Projects). When combined with the existing on-site generation of 2,253 pounds (1.13 tons) of solid waste per day, the total solid waste generation upon Project completion is estimated to be 2,727 pounds (1.36 tons) per day. The Project's increase in solid waste generation would not require any changes to the

existing frequency or routes used for the current solid waste collection services that are currently serving the Project Site. In addition, concrete waste associated with interment site preparation, green waste generated from ongoing landscape maintenance activities would occur between 2011 and 2050 as a result of interment site development. Green waste generated from landscaping activities would either be mulched and used on-site or transported to green waste recycling yards. As such, only solid waste would be disposed of at the Class III Landfills serving the City of Los Angeles. The calculation of the Project's estimated solid waste generation is conservative and does not take into consideration the City's successful efforts to divert disposal of solid waste by 50 percent, in compliance with AB 939. Additionally, the calculation does not take into consideration the reduction in landfill disposal due to the City's current and future efforts to achieve a "zero waste" level (a 90 percent diversion rate) by the year 2025.

Thus it is likely that the amount of solid waste that would need to be landfilled would likely be less than this forecast based on successful implementation of these programs. However, for the purposes of this analysis and to provide for a worst-case scenario, it is assumed that all of the Project's solid waste would be disposed of in landfills. The remaining combined daily capacity of the landfills that are likely to directly serve the Project (i.e., Chiquita Canyon Landfill and Sunshine Canyon Landfill) is 7,329 tons per day. When compared with the combined remaining daily intake at the Chiquita Canyon and Sunshine Canyon Landfills of 7,329 tons per day, the proposed Project's net increase of 474 pounds (0.24 tons) per day represents a negligible (less than 0.01 percent) of the remaining daily intake at these landfills. While the landfills that would serve the Project (Chiquita Canyon and Sunshine Canyon) are anticipated to close by 2019 and 2037, respectively, the County anticipates that in-County landfills, out-of-County landfills (such as the Mesquite Regional Landfill), as well as new conversion technologies will be available to adequately serve future disposal needs through 2023. In addition, in accordance with the requirements of AB 939, the County Department of Public Works will continue to update the Countywide Siting Element as part of the Countywide Integrated Waste Management Summary Plan to identify how the County and cities within the County will address the need for 15 years of disposal capacity to safely handle solid waste generated in the Los Angeles region which cannot be reduced, recycled, or composted. Therefore, Project impacts related to solid waste disposal capacity would be less than significant.

Furthermore, as the proposed Project would recycle green waste materials and would incorporate project design features to minimize its generation of solid waste materials, the Project would be consistent with the Solid Waste Management Policy Plan and Source Reduction and Recycling Element, as well as the provisions of the Countywide Integrated Waste Management Plan. The Proposed Project would also provide adequate storage areas in accordance with the City of Los Angeles Space Allocation Ordinance (Ordinance No. 171,687), which requires that developments include a recycling area or room of specified size on the Project site. The Project would also promote compliance with

AB 939 and City waste diversion goals by providing clearly marked, source sorted receptacles to facilitate recycling. Thus, Project impacts associated with consistency with solid waste plans and policies would be less than significant.

b. Cumulative Impacts

The proposed Project, in combination with other reasonably foreseeable growth within the City of Los Angeles, would generate solid waste including construction-related (i.e., inert) waste, green waste, excavated earth materials, and commercial waste over the approximate 40 year timeframe between 2011 and 2050, extending beyond the 15-year planning timeframe of the Countywide Integrated Waste Management Plan. Management of this waste stream is provided for on a regional basis, as set forth in the Countywide Integrated Waste Management Plan, and in acknowledgement of the regional context of the solid waste issue. Importantly, solid waste itself is a commodity whose ultimate disposal location (i.e., inside or outside the county) is dependent upon a number of factors. In the short-term, adequate landfill capacity exists to accommodate the proposed Project and other foreseeable future growth in the City of Los Angeles consistent with the requirements of AB 939. This is reflected in the County of Los Angeles Department of Public Works transmittal of the 2008 CoIWMP Annual Report the County would be able to provide for the disposal capacity needs of the City's residents and businesses during the 15-year planning period through a combination of all or some of the following: (1) expansion of existing in-County Class III landfills; (2) studying, promoting, and developing conversion technologies; (3) expansion of transfer and processing infrastructure; (4) development of a waste-by-rail system; and (5) maximization of waste reduction and recycling." However, there is a need to continue to develop solid waste management alternatives to accommodate future growth beyond the planning timeframe.

The County will continually address landfill capacity through the preparation of annual CoIWMPs. The preparation of each annual CoIWMP provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity would slow considering the City's goal to achieve 75 percent diversion by 2013 and eventually a zero waste scenario by 2030. While it is anticipated that future iterations of the CoIWMPs would provide for improvements beyond 2023 to serve future waste disposal needs, it is conservatively concluded that potential cumulative impacts could result after 2023 due to related projects and future growth in the region. However, the Project's solid waste disposal demand is inconsequential when compared with existing and future landfill capacity. In addition, recycling programs would be implemented as part of the project. Thus, solid waste impacts would not be cumulatively considerable.

The proposed Project would be consistent with the Solid Waste Management Policy Plan and Source Reduction and Recycling Element and the City of Los Angeles Space

Allocation Ordinance and the City of Los Angeles Space Allocation Ordinance, as well as the provisions of the Countywide Integrated Waste Management Plan, and the solid waste impacts from other reasonably foreseeable growth within the City of Los Angeles would be reviewed on a project-by-project basis for consistency with these planning documents at the time each is considered for approval. Based on the above, the project's cumulative contribution to regional solid waste landfill capacity would be less than significant.

c. Mitigation Measures

The proposed Project's impacts upon solid waste would be less than significant and no mitigation measures are required.

d. Level of Significance After Mitigation

As stated above, no project-specific solid waste mitigation measures are required. Compliance with the solid waste reduction measures that are part of the existing regulatory setting and implementation of the Project Design Features described above would ensure that the Project's impacts upon solid waste landfill capacity would be less than significant.

L. Public Services – Fire Protection

a. Environmental Impacts

(1) Facilities and Equipment

Although the Project would increase the number of structures and interment sites within the Forest Lawn Memorial-Park - Hollywood Hills property, it is not anticipated to increase the level of interment activity or number of daily visitors at the Project Site. As noted above, the average number of daily interments at the Forest Lawn Memorial-Park - Hollywood Hills property has been approximately the same for the last 13 years. Likewise, the death rate in Los Angeles County has remained relatively unchanged for many years. Therefore, the level of daily interment activity is expected to remain stable over the life of the Project, as it has been for the last 13 years. Even if the death rate in Los Angeles County were to increase, the average number of daily interments at the Memorial-Park would not substantially increase, due to existing logistical constraints at the facility. As such, the Project would not result in an increase for calls for fire protection services and would not necessitate the need for additional staffing or equipment. The City of Los Angeles Fire Department (LAFD) has indicated that existing staffing and resources are currently adequate to meet the demand for fire and emergency medical services (EMS) in the Hollywood Community Plan Area. For these reasons, with respect to equipment and personnel, the Project is not anticipated to adversely affect the demand for fire protection services at the Project Site to the extent that a new fire station or the expansion,

consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(2) Fire Flows

Domestic and fire water flow for the existing uses on the Project Site is provided via a low-pressure, 24-inch domestic water main located in Forest Lawn Drive. This main can supply approximately 5,000 gallons per minute (gpm). There is also a high-pressure, 8-inch domestic water main in Forest Lawn Drive that can supply approximately 1,260 gpm fire flow and 400 gpm domestic flow. As an Interim Project, the Applicant is in the process of installing a new high pressure water service line and approximately 1,130 linear feet of pipe. This project was permitted in 2007 and is planned to be completed in early 2011. In addition, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure. Together, these projects are anticipated to improve fire flow pressure on the Project Site.

City-established fire flow requirements generally vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In addition, a minimum residual water pressure of 20 PSI is typically required to remain in the water system while the required gpm is flowing.

The specific fire flow requirement for the Project would be established by the LAFD during its review of building permits. The Water Operations Division of the LADWP would also perform a fire flow study at the time of permit review in order to ascertain whether further water system or site-specific improvements would be necessary. If existing water mains and/or existing hydrants along the Project frontage are determined to be inadequate at the time of Project development, the LAFD would require improvements as part of the Project permitting process. For these reasons, with respect to fire flow, the Project is not anticipated to adversely affect fire flow at the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(3) Emergency Response

The Project Site is located outside the maximum response distance standard set forth in Section 57.09.07A of the LAMC. Accordingly, the LAFD has indicated that the response distance and response time to the Project Site from the nearest fire stations do not meet the LAFD's desired response standards. Nonetheless, the LAFD has indicated that existing staffing and resources are considered adequate to meet the Project area's proposed demand for fire and EMS services because the Project Site's demand for fire

protection services is unique for several reasons. For example, the Forest Lawn Memorial-Park - Hollywood Hills property is a low-density, low-intensity cemetery land use that employs relatively few employees as compared to other commercial, retail, or service uses of comparable size. In addition, the majority of the Memorial-Park's active uses are located outdoors where there is no potential for structure fire. The Project Site would retain these characteristics with implementation of the Project. The majority of the structures proposed under the Project are non-occupiable structures for such uses as burial gardens, wall crypts and columbaria and are required to be constructed with non-flammable building materials such as concrete, masonry and stone.

The Project's proposed new occupiable floor area (including such structures as a new reception facility, administrative space, and a crematory) would be distributed throughout the 444-acre Project Site, thus reducing the potential for an on-site fire to spread from one structure to another. In addition, the Project would generate negligible new traffic trips. As such, the Project would not impede emergency response to the Project Site by significantly impacting roadway intersections in the Project vicinity. Finally, all new occupiable flammable structures would be equipped with automatic fire sprinkler systems in accordance with LAMC Section 57.09.07. For these reasons, response distance and response time, while under LAFD standards, would not be anticipated to adversely affect emergency response to the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(4) Wildland Fire Hazards

The Project Site is located within a Very High Fire Hazard Severity Zone, as designated by the City of Los Angeles, and as such, is subject to brush clearance regulations enforced by the LAFD's Brush Clearance Unit. The majority of the structures proposed under the Project (i.e., the non-occupiable floor area for such uses as burial garden structures, wall crypts and columbaria, which comprise approximately 90 percent of the proposed floor area) would be constructed with non-flammable building materials such as concrete, masonry, and stone. Nonetheless, the Project Applicant would be required to consult with the LAFD Brush Clearance Unit to establish site-specific brush clearance requirements at the time building permits are obtained, thereby ensuring that the Project would not create any undue fire hazard. Therefore, the Project would not be anticipated to adversely affect wildland fire hazards at the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(5) Emergency Access and LAFD Review

The Project proposes to expand the current facilities and develop currently undeveloped areas of the existing 444-acre Forest Lawn Memorial Park—Hollywood Hills property. The Project would not involve the permanent closure of any streets or sidewalks. The Project is not proposing to add new driveways on the streets bounding the Project Site and therefore would not impact site access. Additionally, the Project would not alter the overall internal circulation scheme within the Project Site. Emergency access is currently available from the main access as well as three subsidiary driveways; after completion of the Project, emergency access will be available from the main entrance as well as one subsidiary driveway. Access to the Project Site, including emergency access, would not change under the Project as compared to existing conditions. The Project is not expected to result in increased traffic, including at the primary site access location at Memorial Drive, and no off-site roadway improvements are proposed. In addition, during the plan check process for each new structure, the Project Applicant will be required to submit the proposed plan to the LAFD for review for compliance with applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code. Any requirements identified during the review process would be implemented during Project development, thereby ensuring that the Project would not create any undue fire hazard. Therefore, the Project would not be anticipated to adversely affect emergency access to the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

b. Cumulative Impacts

Implementation of the Project in combination with the related projects would increase the demand for fire protection services from fire stations that serve the Project Site. Specifically, there would be increased demands for additional LAFD staffing, equipment, and facilities by 2050. The LAFD has stated that existing staffing and resources are currently adequate to meet the demand for fire and EMS services in the Hollywood Community Plan Area, and that existing staffing and resources are considered adequate to meet the Project area's proposed demand for fire and EMS services. Currently there are no plans to expand or replace existing fire stations, or construct new fire stations in the vicinity of the Project Site.

For any commercial related project more than one mile from an LAFD Engine Company, or 1.5 miles from an LAFD Truck Company, LAMC Section 57.09.07 requires the installation of automatic fire sprinkler systems in order to compensate for the additional response distance to combustible structures. Therefore, related projects may be required to install automatic fire sprinkler systems as each of the related projects would be required to consult with LAFD and LADWP during their design phase to establish fire flow requirements for the land uses proposed, and to determine adequacy of existing fire flow

infrastructure serving their respective project sites. Any LAFD or LADWP-required upgrades to the water distribution systems serving the related projects would be addressed for each individual related project in conjunction with their project approvals. In addition, each of the related projects would be individually subject to LAFD review and would be required to comply with all applicable fire safety requirements of the LAFD and the City of Los Angeles to adequately mitigate fire protection impacts. If any of the related projects would create demands on fire protection staffing, equipment, or facilities such that a new station would be required, its potential environmental impacts would be addressed in conjunction with the environmental review for that project. Therefore, the proposed Project would not contribute a considerable incremental effect to cumulative fire protection impacts, and cumulative impacts to fire protection services would be less than significant.

c. Mitigation Measures

As summarized in this Section, Project impacts to fire protection service would be less than significant. Accordingly, mitigation measures are not required.

d. Level of Significance After Mitigation

Impacts related to fire protection services would be less than significant.

II. Project Description

A. Project Location

The Project is located at the northeastern base of the Santa Monica Mountains in the City of Los Angeles at the existing Forest Lawn Memorial-Park-Hollywood Hills property, located at 6300 Forest Lawn Drive, in the City of Los Angeles ("Project Site"). The existing Project Site comprises approximately 444 acres and is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the SR 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn Memorial-Park Association on the west,[1] and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. The Project Site is buffered from residential and commercial uses, and many of the property's uses are not visible from off-site, due to the topography of this area. A Regional and Project Vicinity Map is provided in Figure II-1 on page II-2.

1. Zoning and General Plan Designations

The Project Site is located within the Hollywood Community Plan Area. The Project Site zoning designations as set forth by the Los Angeles Municipal Code include A1-1XL-H and RE40-1. In addition, the General Plan land use designation for the Project Site is Open Space. The Project Site is also located within the River Corridor of the Los Angeles River Revitalization Master Plan; however, the Project Site is not located within the boundaries of the proposed River Implementation Overlay District.

The majority of the Project Site, approximately 410 acres, is permitted as a cemetery pursuant to a Conditional Use Permit (CUP) issued by the City in 1948 and approximately

[1] *The Forest Lawn Memorial-Park Association owns approximately 140 acres of contiguous undeveloped land to the west of the Project Site that is not a part of the proposed Project.*



Source: Thomas Guide and Matrix Environmental, 2010.

matrix environmental

Figure II-1
Regional and Project Vicinity Map

30 acres are permitted for cemetery use pursuant to subsequent CUPs.[2] As such, Forest Lawn has operated a cemetery use at this location for approximately 60 years. Forest Lawn has used these approvals, but now seeks a long-term plan for the property. In 2000, the Los Angeles Zoning Code was revised and cemetery uses are now authorized through the Public Benefits process, rather than a CUP. As a result, Forest Lawn seeks a Public Benefits approval for the entire 444 acres of cemetery use, consistent with current Zoning Code procedures.

2. Surrounding Uses

The Project Site is immediately bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn to the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. Surrounding land uses beyond the 134 Freeway to the north include the Disney Studios, the ABC studio office buildings, the Warner Brothers Studios lot, Providence High School, single-family residential uses, a hospital and parks, which are located within the City of Burbank. (See Figure II-2 on page II-4).

B. Project Objectives

Forest Lawn Memorial-Park Association ("Forest Lawn"), the Applicant, is a non-profit, mutual benefit corporation and has been providing cemetery services to the Los Angeles region for over 100 years. The basic purpose of the Forest Lawn Memorial-Park-Hollywood Hills Master Plan Project ("Project") is to provide for additional interment spaces (ground spaces and built spaces such as mausoleums, columbaria, niches, and crypts) and related facilities in order to respond to the existing and increasing demand for interment and funeral resources in the greater Los Angeles area, and, specifically, the demand within the market region for the Forest Lawn–Hollywood Hills property. Within a 15-mile radius of the Project Site, which encompasses the vast majority of the demand for interment sites at the Forest Lawn Memorial-Park-Hollywood Hills property, there are 25 cemeteries with an estimated 280,000 interment sites remaining. As shown in the market study prepared by CBRE Consulting and attached as Appendix K to this Draft EIR, based on current interment rates and projected population growth and death rates for the Los Angeles metropolitan area, CBRE estimates that much of the remaining interment property in the market area will

[2] *Approximately 4.5 acres of the Project Site are not currently permitted by CUP for cemetery use.*



Source: Google Earth Pro and Matrix Environmental, 2010.

matrix environmental

Figure II-2
Aerial Photograph

be depleted in approximately 10 years.[3] Accordingly, the Project proposes to expand current facilities at the Forest Lawn Memorial-Park-Hollywood Hills property in order to provide spaces for interment and funeral resources to meet the regional demand for interment.

Objectives of the Project include:

- Provide interment spaces to address the dwindling supply of interment sites in the Los Angeles area and help meet projected demand for interments for the region through 2050 and beyond.
- Provide various types of interment spaces and mortuary facilities required to meet the needs of various religious, non-religious, ethnic and socio-economic groups, including ground spaces, garden spaces, mausoleums, wall crypts and columbarium spaces.
- Provide a memorial park facility with the ability to accommodate multiple funeral services simultaneously and provide appropriate circulation, parking and access for families and visitors.
- Provide sufficient ground property to meet the needs of a variety of religious, non-religious, ethnic and socio-economic groups.
- Implement construction in a manner that minimizes impacts to the continuing operations of the Memorial-Park and the continuing delivery of interments and funeral services within the Memorial-Park.
- Implement construction in a manner that reduces environmental impacts consistent with the objectives of providing interment spaces to meet regional demand.
- Continue to provide facilities and programs for schools, religious institutions and other organizations and the public at large at the Memorial-Park, consistent with the overall use of the Memorial-Park.
- Provide areas for additional historical and inspirational works of art for the benefit of the community within the Memorial-Park.

[3] *Additional information regarding the critical role of religion, culture and tradition with respect to the types of interment facilities required is presented in Appendix L to this Draft EIR.*

C. Project Background

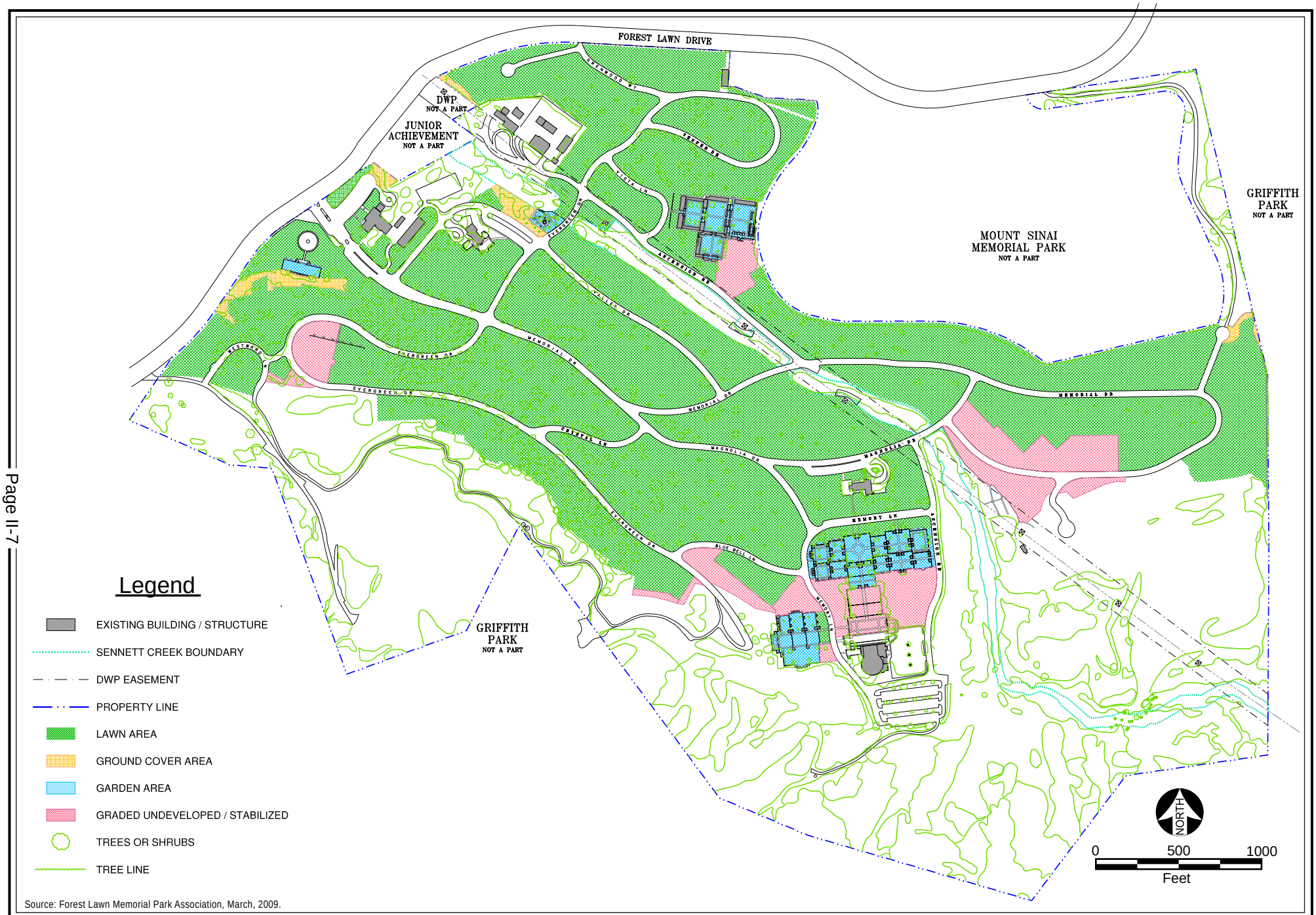
The Project Site is comprised of approximately 444 acres in the City of Los Angeles. As indicated above, the majority of the Project Site, approximately 410 acres, was originally approved by the City for cemetery use in 1948, and as such, Forest Lawn has operated a cemetery use at this location for approximately 60 years. Since the original approval, approximately 30 acres have been added and approved by the City for cemetery use through separate CUPs. Forest Lawn has used these approvals, but now seeks a long-term plan for the property. In 2000, the Los Angeles Zoning Code was revised and cemetery use is now authorized through the Public Benefits process, rather than a CUP. As a result, Forest Lawn seeks a Public Benefits approval for the entire 444 acres of cemetery uses, consistent with current Zoning Code procedures.

D. Existing Conditions

1. Existing Development

The Project Site is characterized with hillsides, terraced hills, and some generally flatter areas. As illustrated in Figure II-3 on page II-7 and summarized in Table II-1 on page II-8, the Project Site is currently developed with approximately 544,303 square feet of structural floor area including approximately 98,679 square feet of occupied floor area and approximately 445,624 square feet of structures, including garden areas, which do not count as floor area under the LAMC. The developed portion of the Project Site includes an administration office, a mortuary and flower shop, a chapel, a storage building, garage and maintenance buildings, the Church of the Hills, the Cremation Garden Columbaria, the Hall of Liberty Auditorium and Museum, Old North Church, outdoor mausoleums, garden areas, interment sites, statues and monuments, as well as landscaping and paved roadways.

An existing City of Los Angeles Department of Water and Power (LADWP) power line easement traverses the Project Site from northwest to southeast. The Project Site is also bisected by Sennett Creek, an existing drainage that directs surface water runoff flow from the Project Site and several off-site tributaries into the Los Angeles River Flood Control Channel. Sennett Creek is in a largely natural state, with both disturbed and undisturbed natural areas. There are currently three crossings over Sennett Creek within the developed portion of the cemetery at Evergreen, Memorial, and Magnolia Drives. The overcrossings have box culverts under them, with wingwalls and concrete aprons extending about 20 feet upstream and downstream from each. Additionally, a portion of Sennett Creek, between Memorial Drive and Magnolia Avenue within the Project Site, has been subject to habitat restoration efforts over a span of several years, including the installation of native plant materials. The extent of existing landscaped areas on the Project Site is illustrated in Figure II-3 on page II-7.



Source: Forest Lawn Memorial Park Association, March, 2009.

matrix environmental

Figure II-3
Existing Site Plan

Table II-1
Summary of Environmental Baseline Conditions

Structures	Occupied (sf)	Non-Occupied (sf)	Total (sf)
Existing Structures (2008)			
Administration/Mortuary/Flower Shop	38,490	--	38,490
Chapel	2,669	--	2,669
Storage Building	--	1,806	1,806
Garage	3,923	5,771	9,694
Maintenance Buildings	8,181	10,772	18,953
Masonry Facility	6,742	3,791	10,533
Church of the Hills	7,991	--	7,991
Cremation Garden Columbaria	--	296	296
Pump House #1	--	3,896	3,896
Courts of Remembrance Wall Crypts & Columbaria	--	27,860	27,860
Old North Church	6,644	464	7,108
Hall of Liberty	24,039	--	24,039
Pump House #2	--	968	968
Courts of Remembrance Gardens (excluding Wall Crypts & Columbaria)	--	91,580	91,580
Gardens of Heritage	--	185,600	185,600
Cremation Garden (excluding Columbaria)	--	17,335	17,335
Courts of Reflection Garden	--	17,385	17,385
Lincoln Terrace Garden	--	78,100	78,100
Subtotal	***98,679***	***445,624***	***544,303***
Interim Projects (2008-2011)			
Demolition Projects			
Storage Building	--	(1,806)	(1,806)
Garage	(3,923)	(5,771)	(9,694)
Masonry Facility	(6,742)	(3,791)	(10,533)
Subtotal Demolition	*(10,665)*	*(11,368)*	*(22,033)*
Structure/Garden Projects			
Invocation Wall Crypts/Columbaria		6,736	6,736
Gardens of Heritage		42,385	42,385
Courts of Remembrance (Garden/Wall Crypts/Columbaria)		7,540	7,540
Courts of Remembrance Gardens		18,850	18,850
Garage/Office/Reception	19,388	9,694	29,082

Table II-1 (Continued)
Summary of Environmental Baseline Conditions

Structures	Occupied (sf)	Non-Occupied (sf)	Total (sf)
Subtotal Interim Projects Construction	*19,388*	*85,205*	*104,593*
Total Net New Interim Projects Development	***8,723***	***73,837***	***82,560***
Total Existing Development [a]	**107,402**	**519,461**	**626,863**

[a] *Existing Development plus net new development resulting from the Interim Projects.*

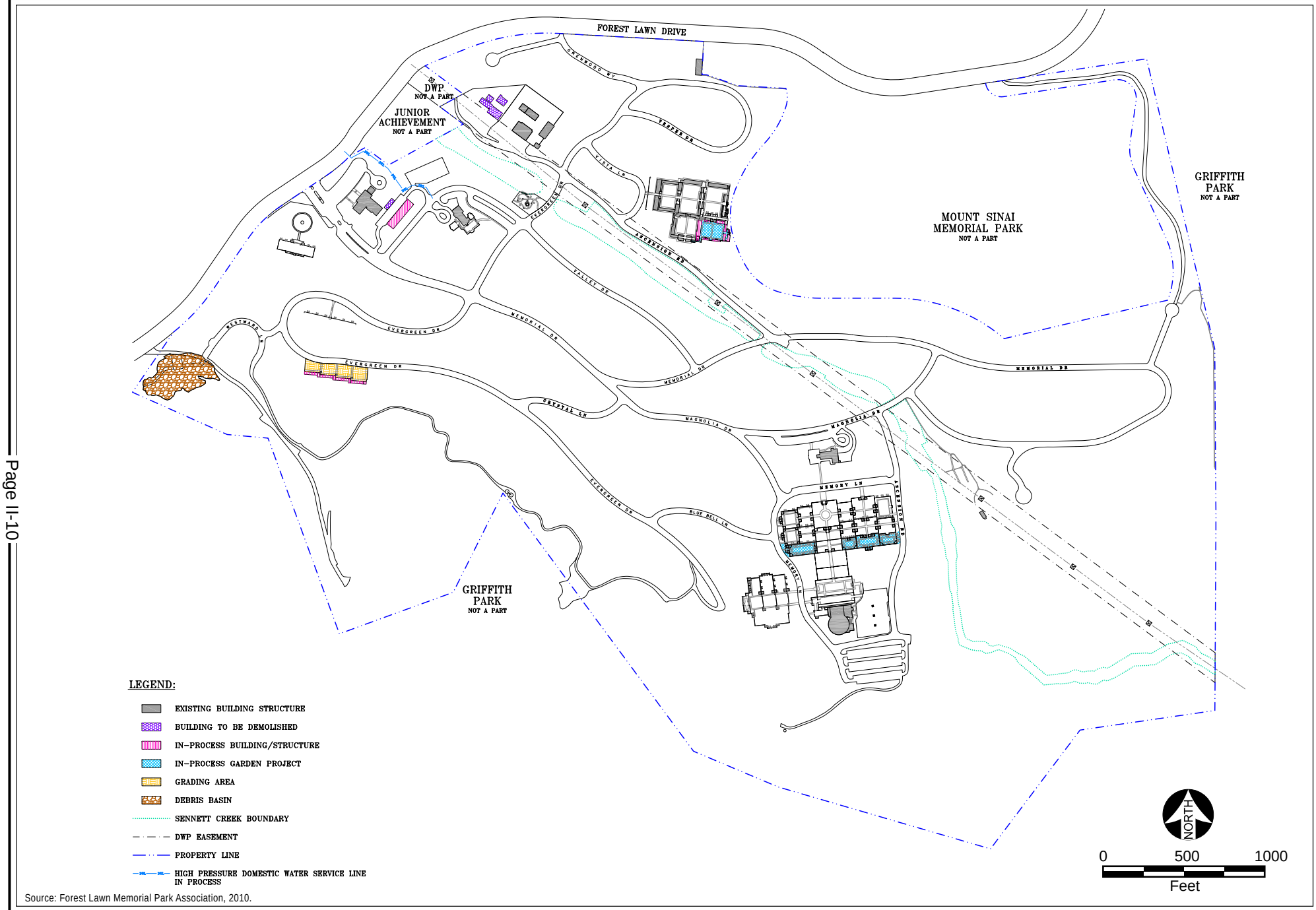
Source: Forest Lawn Memorial-Park Association, 2009.

With the exception of portions of the southern boundary of the Project Site adjacent to natural areas, the remainder of the Project Site is currently fenced with a combination of chain link and wrought iron fences and block masonry walls.

2. Interim Projects

In addition to the existing developed areas of the Project Site described above, it is anticipated that additions and changes on the Forest Lawn Memorial-Park-Hollywood Hills property may occur as part of Forest Lawn's on-going operations at the Project Site in accordance with the existing CUPs. These projects, referred to herein as the "Interim Projects", are anticipated to be constructed between 2008 and 2011. The Interim Projects include additions to the existing administration and mortuary building, as well as additions to the Courts of Remembrance wall crypts and columbaria and the Gardens of Heritage. The Interim Projects also include demolition of a storage building, garage, and masonry facility, as well as construction of a new debris basin near Forest Lawn Drive. The Interim Projects are not part of the Project and will be considered as part of the existing development for purposes of analyzing the Project against existing conditions. They would be completed regardless of the proposed Project being approved, and most of the Interim Projects will be completed by the time the Project is anticipated to commence. The Interim Projects are conceptually illustrated in Figure II-4 on page II-10, and summarized in Table II-1 on page II-8.

In addition to the Interim Projects described above, a haul route was approved for the Forest Lawn Memorial-Park-Hollywood Hills property on November 1, 2006 to address the current and on-going grading and soil management operations. The approved haul route conditionally approves the export of 220,000 cubic yards of previously staged soil from the property for a period not to exceed a maximum of 800 hauling days.



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure II-4
Existing Conditions With Interim Projects Site Plan (2008-2011)

E. Project Characteristics

The Project seeks approval to construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), and approximately 1,100,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria). In addition, the Project includes approximately 200,000 new interment sites within currently undeveloped areas of the Project Site. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. The Project also includes the development and maintenance of debris basins within the Project Site and at the edge of the property boundary with Griffith Park. It is estimated that over a 15-year construction period, implementation of the proposed Project would require approximately 1,728,000 cubic yards of cut, approximately 1,015,000 cubic yards of fill, and a net export amount of approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt will be exported in connection with grave preparation through 2050. Depending on when the entitlement process is completed, construction of the Project could commence in 2011 or 2012. For the purposes of the analyses provided in this Draft EIR, it is assumed that construction would begin in 2011. It is estimated that construction of the new structures would occur over an approximately 40-year period, from approximately 2011 to 2050. The sale of interment sites is also expected to occur over an extended period of time, beyond the year 2050. A summary of development proposed as part of the proposed Project is provided in Table II-2 on page II-12. The Proposed Future Projects Conceptual Site Plan (2011-2050) is depicted in Figure II-5 on page II-13.

1. Scale and Massing

The architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site. The conceptual site plan depicting how the development located within currently undeveloped areas of the Project Site may occur based on existing and planned uses, including new garden developments, wall crypts, columbaria, mausoleums, creek overlooks, spanning bridges, road crossings and catch basins, is illustrated in Figure II-6 on page II-14. Concept plans depicting the proposed building footprints and layouts for the West Area Mausoleum, Central Area Mausoleum #1, East Area outdoor chapel/tower, and Central Area Mausoleum #2 are shown in Figure II-7 on page II-15.

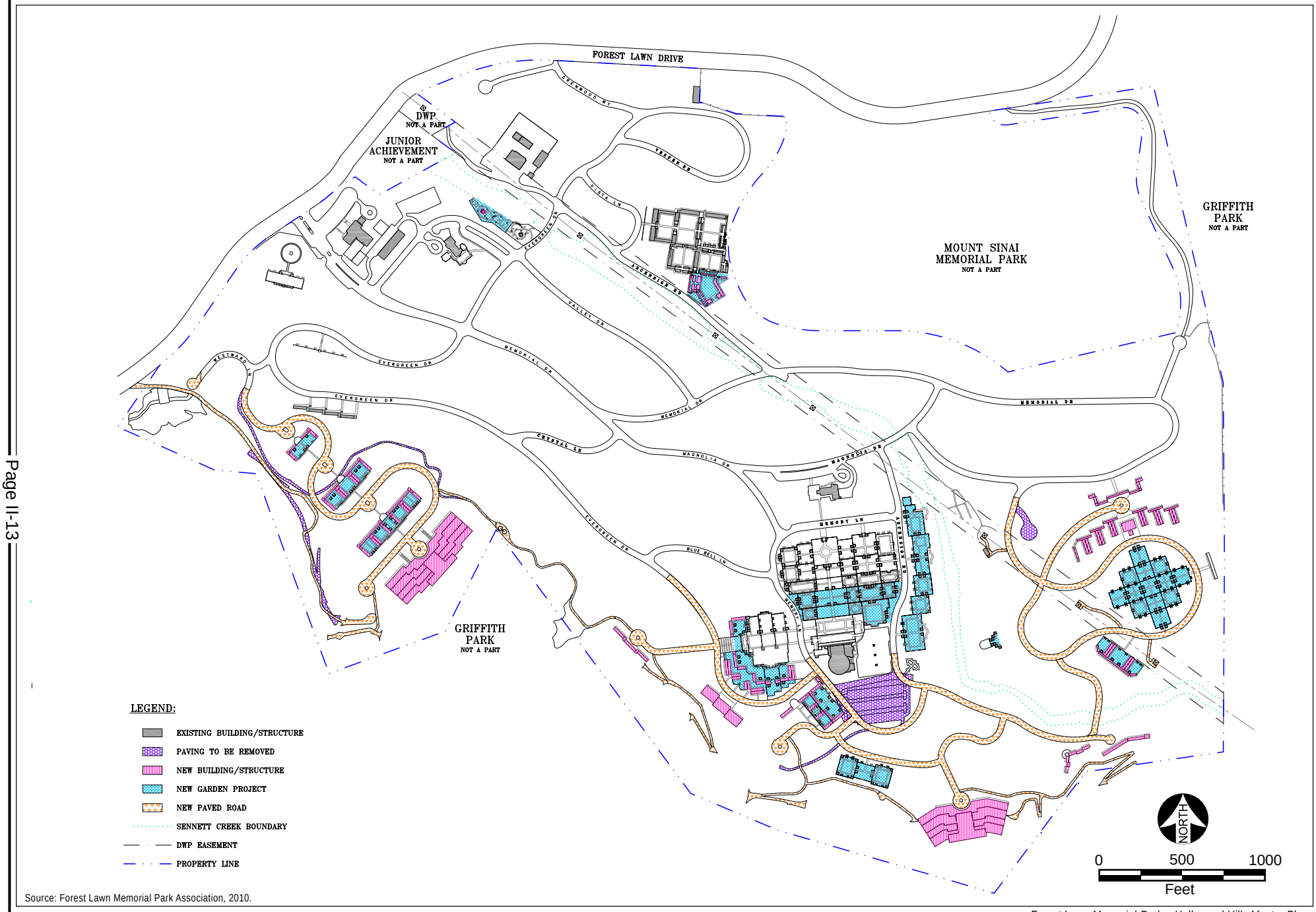
The conceptual site plan for the proposed Project includes a 90-foot bell tower in the East Area, near the proposed outdoor chapel. The bell tower would be a non-occupiable architectural feature. In addition, the mausoleums in the Central and West Areas would be comprised of two to five levels for interment areas. Each level of the proposed

Table II-2
Summary of Proposed Conceptual Development
Forest Lawn Memorial-Park-Hollywood Hills Master Plan

Structures	Occupied (sf)	Non-Occupied (sf)	Total (sf)
Existing Baseline	**107,402**	**519,461**	**626,863**
Proposed Project Structures			
Cremation Garden Columbaria Addition	--	*204*	*204*
Cremation Garden (Excluding Columbaria)	--	*20,855*	*20,855*
Courts of Remembrance Wall Crypts, Columbaria Addition	--	*10,335*	*10,335*
Courts of Remembrance Gardens (Excluding Wall Crypts/Columbaria	--	*27,937*	*27,937*
Administration Addition	*13,089*	*3,585*	*16,647*
Crematory	*5,000*	--	*5,000*
Chapel at Bell Tower (East Area)	*4,400*	--	*4,400*
Bell Tower (East Area)	--	*625*	*625*
West Area Mausoleum (5 levels)	--	*154,000*	*154,000*
Wall Crypts, Columbaria (various locations)	--	*117,000*	*117,000*
Central Area Mausoleum #1 (5 levels)	--	*158,000*	*158,000*
Central Area Mausoleum #2 (2 levels)	--	*36,000*	*36,000*
Gardens of Heritage	--	*119,300*	*119,300*
Sennett Gardens	--	*96,770*	*96,770*
Garden Projects (various locations)	--	*359,000*	*359,000*
Proposed Project Total	***22,489***	***1,103,611***	***1,126,100***
Total (Baseline Development Plus Project)	**129,891**	**1,623,072**	**1,752,963**

Source: Forest Lawn Memorial-Park Association, March 2009.

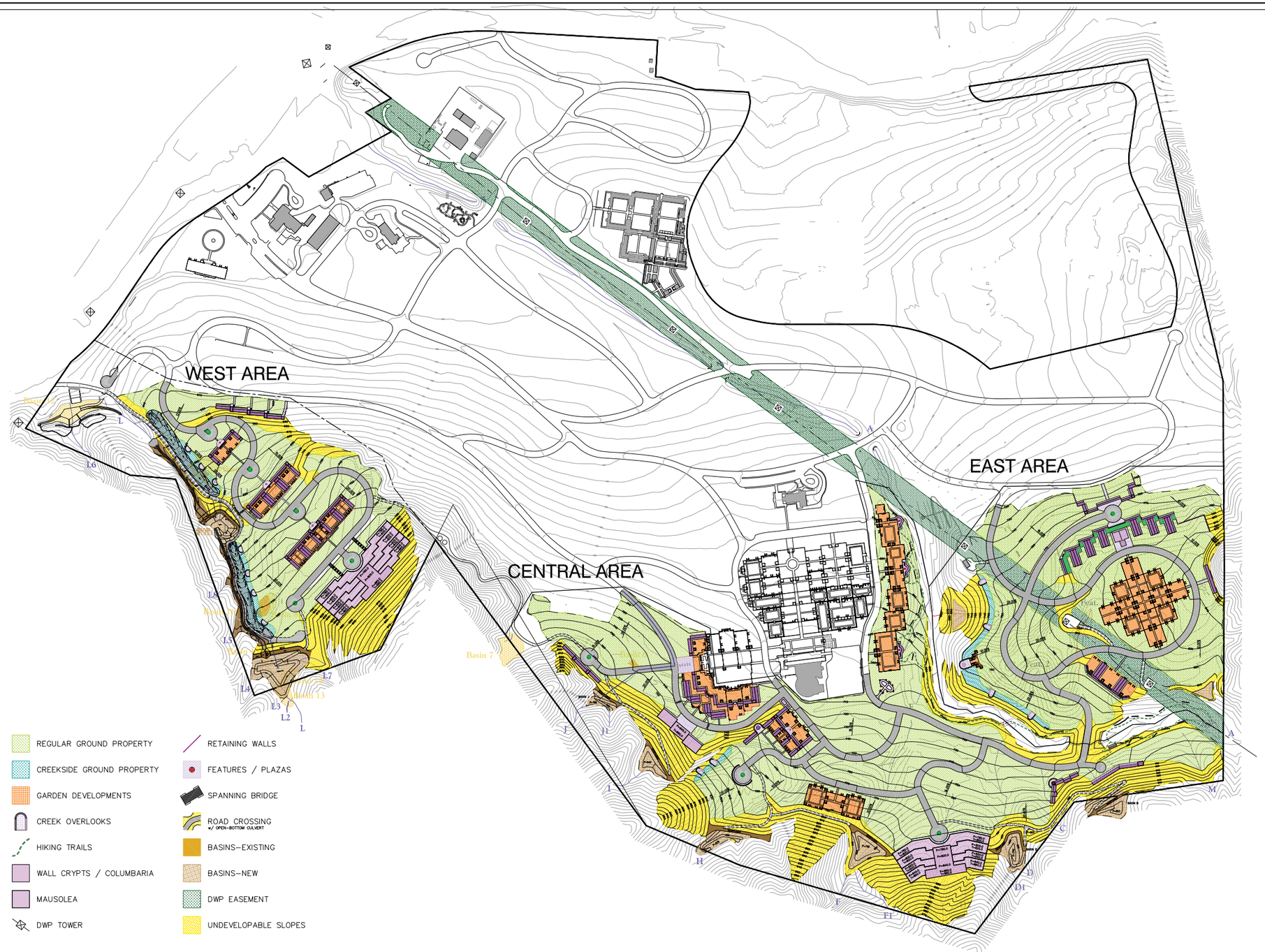
mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height.



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure II-5
Future Projects Conceptual Site Plan (2011-2050)



Source: Forest Lawn Memorial Park Association, August 2010.

matrix environmental

Figure II-6

Conceptual Site Plan for Currently Undeveloped Areas



Source: Forest Lawn Memorial Park Association, 2010; Matrix Environmental, 2010.

matrix environmental

Figure II-7
Detailed Structure Concept Plans

2. Proposed Grading and Stockpiling Plan

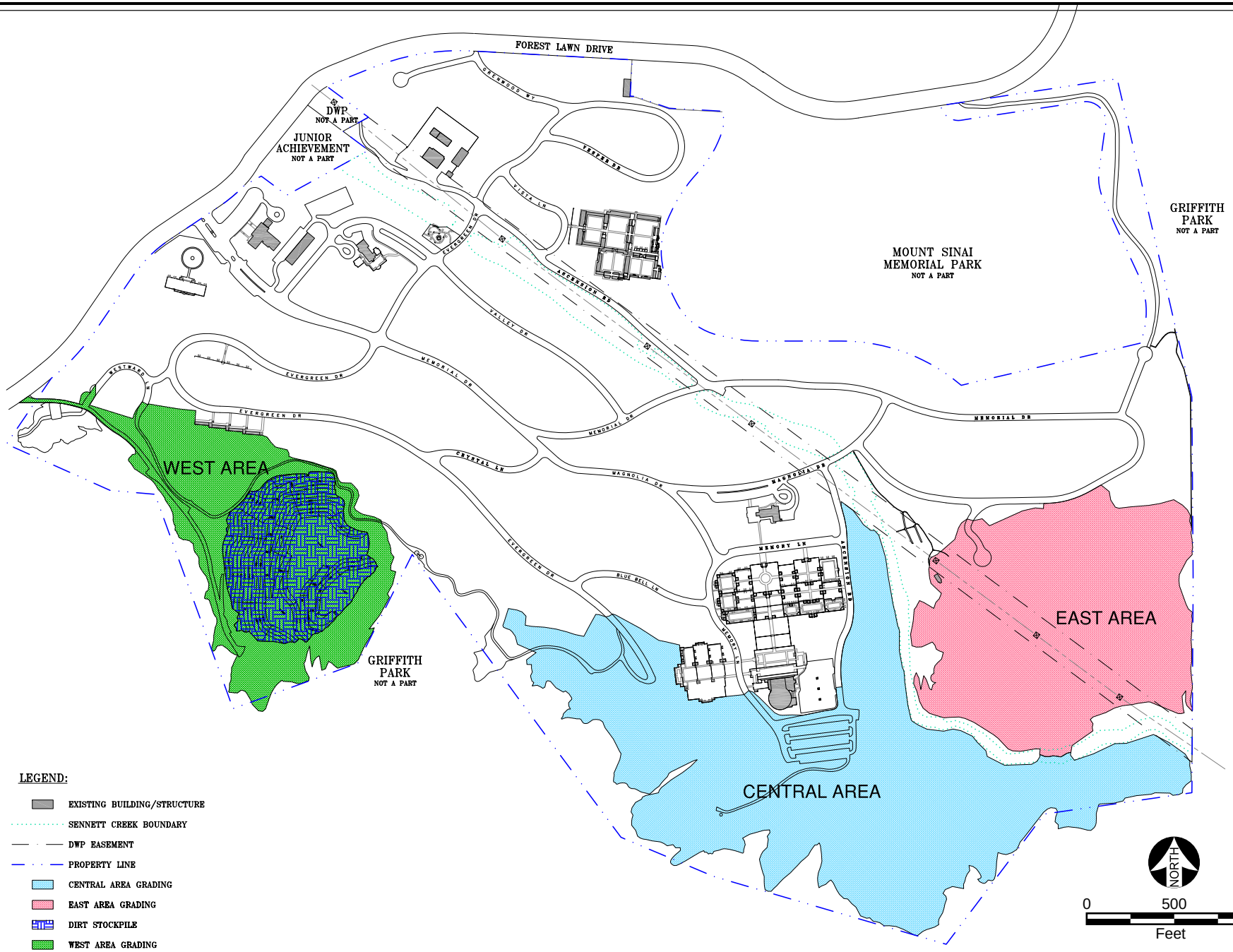
The grading and stockpiling plan is proposed to be divided into three grading areas and three phases (i.e., Phases 1, 2, and 3), as identified in Figure II-8 on page II-17. As summarized in Figure II-9 on page II-18, under the proposed Project, approximately 147 acres of the Project Site would be graded, approximately 94 acres would be developed for interment and approximately 16 acres would be improved with roadway areas and non-interment buildings. In addition, approximately 36 acres of the Project Site would be used for graded slopes, traps and basins. Implementation of the three phases of the proposed Project would require approximately 1,728,000 cubic yards of cut, approximately 1,015,000 cubic yards of fill, and a net export amount of approximately 713,000 cubic yards. The timing and quantity of grading for each of the three phases would vary; however the overall grading amounts would not exceed these cut, fill and export quantities.

The majority of the grading would occur in Phase 1 (Central Area Grading). As part of Phase 1, soil would be stockpiled in the West Grading Area and/or transported off-site. Phase 2 would involve grading in the East Area with soil exported off-site and/or stockpiled in the West Grading Area. Phase 3 would involve grading in the West Area of the Project Site with soil stockpiled and/or transported off-site. The export of soil during the Project would be dependent upon market conditions and construction sites looking for suitable soil for fill material that become available.

During each of the grading phases described above, a modest amount of fine grading and interment property development would occur. Grading of the undeveloped portions of the Project Site for future development is largely constrained by the unique topography of the Project Site and design guidelines related to cemetery use. For example, in general, the maximum ground slope for regular cemetery ground interment areas is designed to be 20 percent or less to provide a safe walking surface for visitors, particularly elderly persons, and casket bearers as well as safe access for interment and maintenance equipment and crews in all weather conditions. Generally, the minimum ground slope for regular cemetery ground interment spaces is also designed to be greater than 2 percent to provide adequate drainage of turf areas without sumps or other deleterious conditions. Graded transition slopes of 50 percent (2:1) or less would be provided to meet City grading standards, soils engineering requirements, and development objectives. Slopes for roadways would be generally 10 percent or less to allow safe ingress and egress to parked vehicles by visitors, particularly elderly persons, and to safely move caskets to and from funeral coaches.

3. Circulation

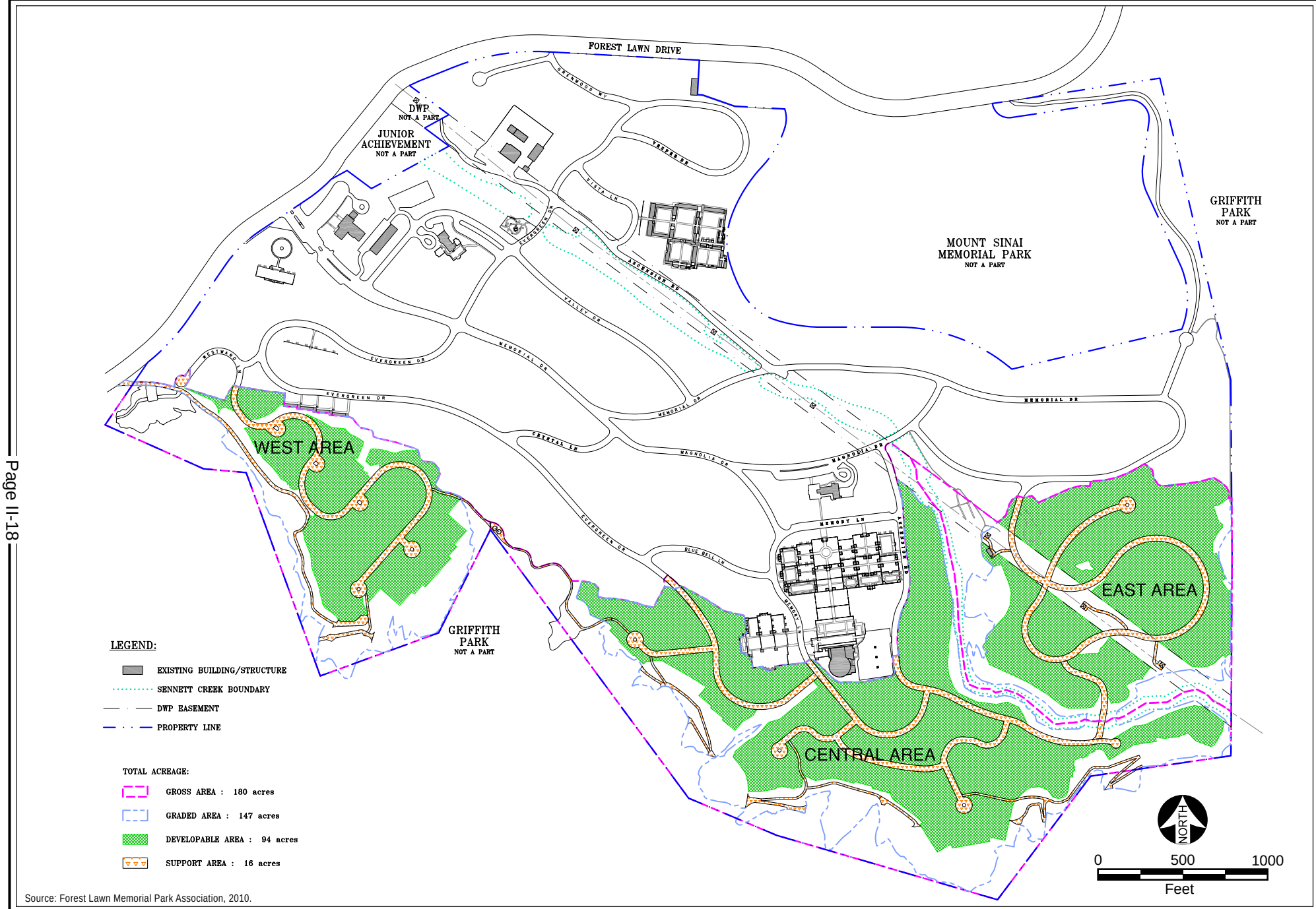
The Project includes important circulation considerations related to the cemetery use. Internal roadways must be designed, for example, to provide for safe ingress and



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure II-8
Proposed Grading Areas



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure II-9
Grading & Roadway Calculation Plan

egress to parked vehicles by visitors, many of whom may be elderly, and to safely move caskets to and from funeral coaches. Standard roadway widths are typically 36 feet (back-of-curb to back-of-curb) to simultaneously allow for parked cars on both sides of the road and provide single lane traffic in both directions. The minimum desired distance between road intersections within the Project Site is 1,000 feet. These standards are necessary to allow simultaneous funeral parking and traffic circulation, including emergency vehicle access. Standard cul-de-sac bubbles with an 85-foot diameter (back-of-curb) are needed for safe, smooth turnaround of 100-inch stretch limousines. Parallel, interconnected and redundant roadway access patterns are needed to provide alternate routes around funeral services and to allow quick, uncongested arrival and departure of vehicles for funeral services unencumbered by the need to execute u-turns. The roadway plan is also designed so that the maximum walking distance from the roadway to interment sites is 300 feet or less for visitors. In addition, as part of the Project, an additional crossing over Sennett Creek would be developed with a concrete box culvert under it similar to the three existing crossings.

4. Landscaping

At buildout, the Project would include over 300 acres of landscaped area including lawns, ground cover, trees and garden areas. Similar to the existing landscaped areas within the developed portions of the Project Site, the proposed landscape plan will connect to the City's water reclamation line and will use reclaimed water for irrigation. Future landscaping (2050) is depicted in the Conceptual Site Plan provided in Figure II-10 on page II-20.

5. Haul Route

The Project includes a request for two haul route permits to export soil from the Project Site: one permit to cover the export of soil in connection with grading activities during the initial construction and grading period for the proposed Project; and a second permit for the export of soil excavated in connection with fine grading and grave preparation over the life of the Project. The most extensive hauling operations would be expected to occur over an approximate five-year period during Phase 2 in connection with export of soil excavated during the Phase 1 grading of the Central Area, however, as noted above, the export of soil during the Project would be dependent upon market conditions and construction sites looking for suitable soil for fill material that become available.

In addition to the grading quantities associated with the initial rough grading, buildout of the proposed Project would involve an additional 400,000 cy of soil exported over the next 40 years as a result of fine grading and grave site development.



Source: Forest Lawn Memorial Park Association, December 4, 2007.

matrix environmental

Figure II-10
Conceptual Site Plan Upon Project Buildout

The haul routes that would be used by haul and delivery trucks during construction and operation would access the Project Site from Forest Lawn Drive and would also access the SR-134 Freeway directly from Forest Lawn Drive. The haul route would not include use of the westernmost entrance to the Project Site along Forest Lawn Drive.

6. Building Construction

Buildout of the Project would occur over an approximately 40-year period, from approximately 2011 to 2050. Construction of approximately 22,500 square feet of new floor area would include such structures as a new church, reception-related uses, administrative space, and a crematory. Approximately 1,100,000 square feet of non-occupied floor area for such uses as burial garden structures, wall crypts, and columbaria would be constructed, and the Project would provide approximately 200,000 new interment sites within currently undeveloped areas of the Project Site, as well as additional interment spaces within existing developed areas of the Project Site. Cemetery structures such as burial gardens and mausoleums would be developed in stages, with incremental amounts of Project development occurring as needed over the life of the Project.

F. Intended Uses of the EIR and Discretionary Actions

The purpose of this EIR is to obtain the appropriate environmental review and approvals to facilitate the continued operation and long-term development of the Forest Lawn Memorial-Park-Hollywood Hills property, in order to meet the demand for additional interment sites and related cemetery facilities in the southern California area. In order to provide for these future needs, Forest Lawn seeks a Public Benefits approval, Development Agreement, Site Plan Review findings, grading and stockpiling permits, haul route approvals and related land use and building permits as required for the Project. Forest Lawn will also request a Protected Trees Removal permit through the Department of Public Works. To the extent that any proposed Project structures, such as the bell tower, exceed the height limitations imposed by the zoning code, the Project will include a request for either a variance or an alternative compliance measure pursuant to the public benefit provisions of the zoning code. In addition, regulatory permits would include an Individual 404(b) Permit with a 50 year maintenance provision from the United States Army Corps of Engineers, a 401 Water Quality Certification from the Regional Water Quality Control Board and a Streambed Alteration Agreement with a 50 year maintenance provision from the California Department of Fish and Game.

The City of Los Angeles Department of City Planning will serve as the Lead Agency for the EIR, pursuant to the California Environmental Quality Act (CEQA). It is the intent of this EIR that once the EIR is certified and the proposed Project is approved, that no further

environmental clearance pursuant to CEQA would be required. A National Environmental Policy Act clearance will also be prepared with respect to the portion of the Project within the Army Corps of Engineers' jurisdiction, with the Army Corps of Engineers serving as the Lead Agency for that clearance.

III. Environmental Setting

A. Overview of Environmental Setting

The purpose of this Section is to provide an overview of the existing regional setting in which the Project Site is located and a brief description of the existing conditions of the Project Site, as they apply to each of the environmental issue areas analyzed. Detailed environmental setting information is provided in each of the environmental issue analyses provided in Section IV, Environmental Impact Analysis, of this Draft EIR. Additionally, Section II, Project Description, of this Draft EIR provides additional information about baseline conditions at the Project Site.

The Project is located at the southeastern edge of the San Fernando Valley at the existing Forest Lawn Memorial-Park – Hollywood Hills property, located at 6300 Forest Lawn Drive, in the City of Los Angeles ("Project Site"). The existing Project Site comprises approximately 444 acres at the northeastern base of the Santa Monica Mountains and is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the SR 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn Memorial-Park Association on the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. Surrounding land uses beyond the SR 134 Freeway to the north include the Disney Studios, the ABC studio office buildings, the Warner Brothers Studios lot, Providence High School, a hospital, parks and single-family residential uses, which are located within the City of Burbank. The Project Site is buffered from residential and commercial uses to the north by Forest Lawn Drive, the SR 134 Freeway, and the Los Angeles River Flood Control Channel.

1. Aesthetics

a. Visual Character and Viewsheds

The approximately 444-acre Project Site is located at the base of the Santa Monica Mountains in the City of Los Angeles, and is largely developed with the existing Forest Lawn Memorial-Park—Hollywood Hills property. The Project Site is located between a highly developed urban area and the undeveloped Santa Monica Mountains and Griffith Park. Much of the developed and undeveloped portions of the Project Site, which generally slopes south to north, are not visible from off-site vantage points to the north due to the topography of the Project vicinity, existing vegetation, and the developed urban

environment. South of the Project Site, large portions of the Site are visible from a limited number of vantage points within Griffith Park due to topography and natural vegetation. The public vantage points of the Project Site from Griffith Park include Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel. The on-site natural landscape is characterized by hillsides, terraced hills, and generally level areas. The areas of the Project Site that are developed with the existing cemetery use are professionally landscaped and incorporate shrubbery, flower gardens, ornamental trees, and native oak trees. Portions of the Project Site's undeveloped areas have been disturbed by past development and continued grading efforts for Interim Projects. These graded areas contain unvegetated soil, terraces, and sediment controls and are visible from vantage points within the Project Site and from vantage points in Griffith Park.

The Project Site is buffered from both residential uses and studio office uses located to the north, and much of the property is not visible from off-site locations to the north due to the topography of the immediate area. The most prominent public views of the Project Site are available from Griffith Park to the south and east. The areas of Griffith Park that border the Project Site to the south and east are characterized by rugged, chapparal-covered hillsides and canyons, and feature a network of roadways and trails, which are primarily used by hikers, equestrian riders, and cyclists.

Two other public open space locations in the vicinity of the Project Site include Buena Vista Park, located on Riverside Drive, and Johnny Carson Park, located further to the north of Buena Vista Park. Views of the Forest Lawn Mortuary and Flower Shop on the Project Site, as well as the adjacent hillside areas within the Project Site can be seen from Buena Vista Park. However, the Project Site is not visible from Johnny Carson Park due to the low elevation standpoints in Johnny Carson Park, combined with the dense year-round tree canopy that lines the SR 134 Freeway.

Forest Lawn Drive (from Barham Boulevard to Griffith Park Drive), a Major Class II Highway, is designated as a scenic parkway in the City of Los Angeles General Plan Transportation Element. It is situated at a lower elevation than the Project Site. Forest Lawn Drive is characterized as a winding road past the northeastern base of the Santa Monica Mountains, the gateway entrance to the Project Site, the Junior Achievement of Southern California, Inc., Mount Sinai Memorial Park, and the entrance to Griffith Park. Public views of the Project Site from Forest Lawn Drive are limited to the Site's foreground due to the location of existing vegetation and on-site structures, and the Project Site's topography in relation to Forest Lawn Drive. Additionally, views of the base of the Santa Monica Mountains from Forest Lawn drive are obstructed by the same features.

In general, the Project Site is not easily viewed from street level vantages to the north within the Burbank community, with only a limited number of elevated standpoints

and street alignments at greater distances affording limited public views of the Project Site. These locations include roadways such as Buena Vista Street as it approaches the SR 134 Freeway, and the segment of West Alameda Avenue between the Interstate 5 Freeway and Victory Boulevard.

Public views of the Project Site are available from several locations immediately to the east and south, within Griffith Park. The public vantage points of the Project Site from Griffith Park include Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel. From Mount Hollywood Drive, the steep topography and canyons, as well as the extent of mature vegetation adjacent to the roadway, substantially limits the visibility of the portions of the Project Site's East Area; however, the remainder of the Project Site is visible. Views from the Toyon Trail are somewhat obstructed by topography and native vegetation, although there are segments of the trail (particularly along the trail's southwestern extent) where the majority of the Project Site is visible from the trail. Regarding views from Mount Lee and Mount Chapel, the Project Site's southern boundary is largely obstructed from view by the area's topography and mature vegetation. However, the Project Site's developed areas, as well as portions of the Project Site's proposed development areas are visible.

Private views of the Project Site are available from the southeast edge of Mount Sinai Memorial Park at its interface with a small section of the Project Site. Currently, the combined effect of a grade separation between the two properties and the absence of any intervening structures, landscape or ridgelines, enables unobstructed private views across the eastern section of the Project Site.

b. Light & Glare

(1) Existing Nighttime Lighting

The Project area provides relatively low levels of ambient nighttime lighting, most of which is generated from the surrounding street network including Forest Lawn Drive. Nighttime lighting along these corridors is generated by street lights; vehicle headlights; and architectural lighting, security lighting, and building illumination (light emanating from the interior of structures through windows) from surrounding studio, commercial office, and residential uses. Existing uses on the Project Site generate a moderate amount of lighting from security, signage, and parking. Additionally, the Forest Lawn Memorial-Park—Hollywood Hills property hosts several nighttime events and services throughout the year, which may generate additional temporary nighttime lighting.

(2) Existing Daytime Glare

Most glare in the Project area is generated by reflective materials on commercial buildings and from vehicles passing on the surrounding street network. Minimal glare is currently generated on the Project Site itself. Specifically, the surface parking areas that can be the source of glare (from reflective surfaces on cars) are located near the entrance of the Memorial-Park, near Forest Lawn Drive on the southern portion of the Project Site. This area is shielded from public view. The vast majority of the Project Site is generally landscaped, thus it does not contribute to glare.

c. Sensitive Land Uses

Due to the topography of the Project Site, as well as the surrounding land uses, the Project Site is not typically susceptible to lighting impacts from other properties. Because all activities within the Project Site are coordinated and controlled by Forest Lawn, the Project Site is not considered a sensitive land use. However, uses that would be considered sensitive to substantial light or glare would include visitors to Mount Sinai Memorial Park or Junior Achievement of Southern California, Inc., located immediately north of and adjacent to the Project Site, and Griffith Park to the south. No other land and glare sensitive land uses were identified due to the topography of the Project Site, as well as the distance to the non-residential surrounding land uses to the north across the SR 134 Freeway.

2. Air Quality

a. Air Quality

The proposed Project lies on the north side of the Santa Monica Mountains in the City of Los Angeles which is located within the South Coast Air Basin, named so because its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys below. This Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is primarily influenced by a wide range of emissions sources – such as dense population centers, heavy vehicular traffic, and industry – and meteorology.

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples include boilers or combustion equipment that

produces electricity or generates heat. Area sources are widely distributed and produce many small emissions. Examples include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbeque lighter fluid and hair spray. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, and mobile sources, primarily automobile traffic. Motor vehicles are the primary source of pollutants in the local vicinity.

Both the federal and State governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria that have been adopted for them. The national and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. With regard to the criteria pollutants, the South Coast Air Basin is designated as being in "non-attainment" for Ozone, PM_{10}, and $PM_{2.5}$, and is "in attainment" with respect to Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide and Lead.

As mentioned above, national and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations. The location of the nearest off-site sensitive receptor to the Project is directly to the east at Griffith Park. Residential neighborhoods are located across Forest Lawn Drive and the Los Angeles River Flood Control Channel to the north and northwest of the Project Site approximately 1,200 feet and 375 feet, respectively.

b. Greenhouse Emissions

Greenhouse gasses (GHGs) are called so because they reflect shortwave radiation back towards the earth, resulting in a warming of the atmosphere. This phenomenon is known as the "greenhouse effect." Increased concentrations of GHGs in Earth's atmosphere may potentially lead to global climate change and potentially such conditions

as rising surface temperatures, melting icebergs and snowpack, rising sea levels, and the increased frequency and magnitude of severe weather conditions.

GHGs are the result of both natural and human-influenced activities. The six most globally important human-influenced GHGs include carbon dioxide (CO_2), methane, nitrous oxide, haloalkanes, perfluorocarbons, and sulfur hexafluoride. These gases have different potentials for trapping heat in the atmosphere, called global warming potential. Carbon dioxide is the most abundant GHG in the atmosphere. As reported by the California Energy Commission, California contributes 1.4 percent of global and 6.2 percent of national GHG emissions. Approximately 80 percent of greenhouse gases in California are carbon dioxide produced from fossil fuel combustion.

3. Biological Resources

The approximately 444-acre Project Site is largely developed with the existing Forest Lawn Memorial-Park, which encompasses approximately 230 acres of the Project Site. The remaining portions of the Project Site consist of approximately 91 acres of disturbed areas, approximately 3 acres of ornamental vegetation adjacent to natural areas, and approximately 120 acres of natural habitat. Recent topographic mapping of the Project Site indicates that approximately 324 acres of the Project Site is relatively disturbed topographically due to previous grading and development activities.

The Project Site is bordered by Griffith Park and associated vacant lands to the east and south, and by undeveloped land owned by the Forest Lawn Memorial-Park Association to the west. The plant communities on the natural habitat (undeveloped) portions of the Project Site include woodlands, chaparral, coastal scrub, grassland, and riparian scrub. The areas of the Project Site with natural habitat are considered to have a moderate to moderately high value to wildlife, including birds and mammal species. Developed and disturbed areas of the Project Site are generally considered to be of low habitat value to wildlife, though several common urban-adapted species such as squirrels and raccoons may pass through the site.

Sennett Creek traverses the southeast-northwest direction and includes a habitat restoration zone between Memorial Drive and Magnolia Avenue. Vegetation communities surrounding Sennett Creek include southern willow scrub, western sycamore/coast live oak, and western sycamore woodland/willow riparian (the dominant vegetation community in the habitat restoration zone) communities. Additionally, Sennett Creek provides habitat and cover for riparian-dwelling and stream-dependent organisms. Sennett Creek has no direct ecological connection with the Los Angeles River Flood Control Channel as it once did in the past.

Griffith Park is located south and east of the Project Site. The Griffith Park Significant Ecological Area (SEA) was designated by the County of Los Angeles in 1976. It was described at the time as important by virtue of its geographic location and as an island of natural vegetation surrounded by urban and suburban development. The Project Site lies almost entirely outside of the Griffith Park SEA. The southwestern corner of the Project Site appears to be in the SEA.[1] The SEA does not include the developed portion of the Project Site, but does include approximately 40 to 45 acres (less than 10 percent) of the Project Site that were previously used for surface mining activities.

Natural communities present on the Project Site that either appear in the *City of Los Angeles CEQA Thresholds Guide's* list of "Highest Inventory Communities" or are designated by the CDFG as a "Special Community" are as follows: western sycamore/coast live oak, coast live oak woodland, southern willow scrub, western sycamore woodland/willow riparian forest, California walnut woodland, and southern willow scrub/mulefat scrub.

Based on the data compilation, background research, and site surveys, 13 regulatory status wildlife species were confirmed present, or determined to have a moderate or high potential presence, on the Project Site. These include four reptile species (California mountain kingsnake, coast horned lizard, coast patchnose snake, and California legless lizard), three bird species (Cooper's hawk [for nesting], yellow warbler [for nesting], and Southern California rufous-crowned sparrow), and six mammalian species (San Diego desert woodrat, ringtail, western red bat, pallid bat, spotted bat, and western mastiff bat).

Four regulatory status plant species have been detected within the Project Site: Catalina mariposa lily, Coulter's matilija poppy, ocellated Humboldt lily, and Southern California black walnut.

All trees within the Project Site that are protected under the Los Angeles Municipal Code (LAMC) have been identified, inventoried, evaluated and mapped. Currently, there are a total of 1,425 protected trees within the Project Site: 1,007 coast live oaks, 220 western sycamores, and 198 Southern California black walnuts.

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[1] *Due to the generality of SEA mapping techniques and the scale at which the SEA boundary is depicted, it is difficult to determine the precise boundary of the SEA.*

All drainages and other potentially jurisdictional features present on the Project Site were investigated for the potential to be jurisdictional. A total of 6.65 acres of potential Corps jurisdictional "Waters of the U.S." ("waters"), which includes 2.90 acres of non-wetland "waters" and 3.75 acres of wetland "waters" are present on the Project Site. A total of 17.43 acres of potential CDFG jurisdictional "streambeds" (which encompasses the 6.65 acres of potential Corps jurisdictional "waters") are present on the Project Site.

4. Cultural Resources

a. Historic Resources

A records search was performed through the California Historical Resources Information System South Central Coastal Information Center (SCCIC). The records search conducted by LSA identified that the address of the Forest Lawn Property is listed in the Historic Properties Directory. However, the site description refers to the original Forest Lawn Memorial-Park and Mortuary in Glendale, which opened in 1906, and not the Project Site. No previously recorded cultural resources identified within the Project Site or within 0.5 mile of the Project Site.

Employing the criteria of both the National Register of Historic Places and the California Register of Historic Places, the developed portion of the Project Site appears to be potentially eligible for designation as a designed historic landscape and potentially eligible for designation as a City of Los Angeles Historic Cultural Monument because it is a notable work of Hubert Eaton, an amateur in landscape design who created the essential tenets of the modern memorial park out of a reaction to earlier movements in cemetery design. Character-defining features of the Memorial-Park include a quiet setting, rolling hills landscaped with lawns accented with manicured trees and shrubbery, broad expanses of interment lots characterized by flat bronze tablets set into the ground, and widely dispersed memorial statuary and benches among the interment sites. The potentially eligible designed historic landscape is composed of a variety of contributing features, including the landscaped Memorial-Park, nine contributing architectural features, six noncontributing architectural features, roadways and paths, and various statuary and monuments.

The Project Site borders Griffith Park to the south and east. Griffith Park is a 4,218-acre City Park located within the eastern edge of the Santa Monica Mountains, northwest of downtown Los Angeles. Most of Griffith Park was originally donated to the City by Colonel Griffith J. Griffith in 1896. On January 27, 2009, the Los Angeles City Council formally adopted the designation of Griffith Park as an Historic-Cultural Monument.

b. Archeological and Paleontological Resources

As mentioned above, a records search performed through the SCCIC revealed no previously recorded cultural resources identified within the Project Site or within 0.5 mile of the Project Site. A review of historic maps and aerials shows three different houses as well as associated outbuildings, no longer extant, that were constructed within the Project Site prior to Forest Lawn's acquisition of the property in the 1940s. The builder(s) of the houses are unknown, as Los Angeles County Assessor's records are unavailable for this property until 1924. The Forest Lawn Memorial-Park—Hollywood Hills opened in 1952.

A systematic pedestrian cultural resource survey of the Project Site was conducted by a qualified archaeologist and architectural historian. No prehistoric archeological resources were observed on the Project Site. Further, the pedestrian survey was unable to locate physical manifestations of the houses and barns that were identified during archival research as being located on the Project Site. Several cultural resources were identified on-site during this systematic field survey, and include the remnants of a water conveyance system, the remnants of two roads, part of a cobble and mortar wall, a graded pad, and two bridges. None of the ten identified features are eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

5. Geology/Soils

a. Geology and Topography

The Project Site is located near the northeastern end of the Santa Monica Mountains. The Project Site occupies the south margin of a small valley that drains north to northwest from Cahuenga Peak toward the Los Angeles River Flood Control Channel. Elevations range from approximately 505 feet above mean sea level (ft MSL) in the northwestern portion of the Project Site to approximately 1,000 ft MSL in the southern portion of the Project Site.

The Santa Monica Mountains define part of the southern edge of the central Transverse Ranges geomorphic province, south of which lies the Peninsular Ranges province. Earth materials that underlie most of the Project Site area consist of either older alluvium or bedrock units of the upper Topanga Formation of Miocene Age. In addition, minor amounts of recent alluvium and artificial fill are found.

The Project Site is located within a designated City of Los Angeles Methane Zone. The Project Site is not within an Alquist-Priolo Earthquake Fault Zone. There are no known active or potentially active faults on or adjacent to the Project Site. Numerous inactive (no movement in the last 11,000 years) faults are present within the vicinity of the Project Site.

For instance, the closest active or potentially active fault to the Project Site is the Hollywood Fault, located approximately 2.6 miles from the Project Site. The second and third closest active or potentially active faults to the Project Site are the Raymond and Verdugo Faults, located 5.7 miles and 5.8 miles away, respectively.

The Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. The clayey alluvium and Topanga Formation and the diorite bedrock beneath and near the Project Site are expected to exhibit relatively low hydraulic conductivity.

There is no evidence of landsliding on the Project Site. However, hillside areas south of the West, Central, and East Areas are shown on the Burbank Quadrangle Seismic Hazards Map, prepared by the California Geological Survey (formerly the Division of Mines and Geology) to have a potential for "earthquake-induced landsliding".

6. Hazardous Materials/Risk of Upset

Certain on-site activities involve the acquisition, use, storage, and disposal of hazardous materials. Forest Lawn has operated a cemetery use at the Project Site for approximately 60 years. Prior to 1948, the Project Site included a ranch, film set, private residence, and a horse track and stables. Forest Lawn Memorial-Park has operated on the site since 1952. Many of the on-site structures were built prior to 1970 and may contain asbestos-containing materials (ACMs) and/or lead-based paints (LBPs).

A former aggregate quarry on a 20.7-acre area in the southwestern portion of the Project Site was operated for decomposed granite by Mid-City Granite from 1969 to 1994; however, starting in 1994, Forest Lawn "reclaimed" the mining area pursuant to an approved reclamation plan. The reclamation was completed and approved by the local and state agencies in 2006.

There are four known former disposal areas on the property, including a Caltrans disposal area, a closed 2.5-acre disposal area, an area referred to as "Disposal Area 1," and an area referred to as "Disposal Area 2." No hazardous or potentially hazardous materials are known to have been disposed of at the former disposal areas. All four former disposal areas have been closed and are currently regulated under individual City approved Post-Closure Land Use Plans. Localized methane was encountered in investigations in the vicinity of former Disposal Area 1 and Disposal Area 2. In addition to localized methane, the Project Site is located in an identified City of Los Angeles Methane

Zone. The proposed Project's development areas would occur within the vicinity of the former 2.5-acre disposal area and Former Disposal Area 2.

A database search report revealed that the Project Site is listed on several government databases for the disposal of small quantities of waste oil, asbestos-containing waste, and other inorganic solid and liquid wastes; a discontinued concrete vault plant; as containing several underground storage tanks (USTs); and for a closed, unpermitted solid waste disposal site. As mentioned above, all former disposal areas are closed and operating under City approved Post Closure Land Use Plans. Several other properties located within one mile and up-gradient of the Project Site were listed on government databases, including the Mt. Lee Communication Center and the closed Toyon Canyon Landfill.

Two approximately 10,000-gallon gasoline USTs were removed from the Project Site in November 1990. Subsequent soil samples were taken below these USTs and based on the results of these additional soil samples, a No Further Action letter was issued by the LAFD in December 1991. One 10,000-gallon UST containing unleaded gasoline, one 2,000-gallon UST containing diesel fuel, and a dispenser island at the fueling area are still located on the Project Site, in the Maintenance Yard area.

For purposes of this Draft EIR, the following land uses surrounding the Project Site are identified as sensitive land uses with respect to hazardous material exposure:(1) Buena Vista Park at the southeast corner of Riverside Drive and Bob Hope Street, approximately 0.08 miles north of the Project Site; (2) Johnny Carson Park at the northeast corner of Riverside Drive and Bob Hope Street, approximately 0.19 miles north of the Project Site; (3) Providence High School at 511 S. Buena Vista Street, approximately 0.13 miles north of the Project Site; (4) Providence St. Joseph's Medical Center at 501 S. Buena Vista Street, approximately 0.28 miles north of the Project Site; (5) single-family residences approximately 0.07 miles northwest of the Project Site; and (6) single-family residences approximately 0.30 miles north of the Project Site.

7. Hydrology/Water Quality

Regarding surface water, the Project Site is located within the Los Angeles River Watershed. The Los Angeles River Watershed covers a land area of over 834 square miles. The Los Angeles River, which once flowed freely over the coastal plain, was channelized between 1914 and 1970 to control the runoff and reduce the impacts of major flood events in the region. Today, the Los Angeles River is lined with concrete on 47.9 miles of its 51-mile course. The Los Angeles River Watershed has impaired water quality in the middle and lower portions of the basin due to runoff from dense clusters of commercial, industrial, residential, and other urban activities. The 1998 303(d) list

impairments in a majority of the watershed are due to point and non-point sources. These impairments include the following: pH, ammonia, a number of metals, coliform, trash, scum, algae, oil, chorpyrifos as well as other pesticides, and volatile organics.

Due to the topographic characteristics of the Project Site and adjacent hillside areas to the south, the Project's hydrological drainage area encompasses approximately 930 acres. The Project's hydrological drainage Area is mostly undeveloped with steep slopes, vegetated hillsides, and in some areas recently burned areas. The Project Site is located within Flood Zone X, as designated by the Federal Emergency Management Agency, indicating the Project Site is outside the area subject to inundation by a flood having a 0.2 percent annual chance of flooding (i.e., outside the 500-year flood zone).

The Hydrologic Drainage Area for the Project Site is divided into three separate drainage areas, Drainage Areas "A", "B", and "C." Drainage Area "A" occupies approximately 180 acres of the southwest portion of the Project Site, adjacent to the south side of Forest Lawn Drive. Within Drainage Area "A", all stormwater flows into an unnamed, northwest-trending natural drainage channel (defined as Drainage "L" in this Draft EIR section) that eventually drains into the Los Angeles River Flood Control Channel, located just north of the Project Site, through existing 48" reinforced concrete pipe storm drains.

Drainage Area "B" occupies approximately 700 acres and includes a majority of the Project Site. Drainage Area B also includes stormwater flows from the several of the adjacent north facing slopes within Griffith Park. All stormwater in Drainage Area B flows into the on-site Sennett Creek, which runs northwesterly through the Project Site, and outlets into the Los Angeles River Flood Control Channel through three existing 60" corrugated metal pipes. Sennett Creek is located entirely on the Project Site and begins in the southern portion of the Project Site where stormwater flows from the north facing slopes of the Santa Monica Mountains converge into a more distinct channel. Sennett Creek ends at the northern portion of the Project Site, where it enters the three existing 60" CMPs, which flow north under Forest Lawn Drive into the Los Angeles River Flood Control Channel.

Area "C" occupies approximately 50 acres located east and west of Mount Sinai Memorial Park. Area "C" is within the Project Site, however beyond any proposed Project development. The drainage area is also made up of non-contiguous areas that drain directly off-site. Portions of Area "C" drain easterly via surface flow and through an existing storm drain system; other portions, located west of Mount Sinai drain north onto Forest Lawn Drive.

Regarding groundwater, the Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area, in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. Minor amounts of groundwater are expected in the main canyon areas and underlying the developed and irrigated Project Site.

8. Land Use and Planning

The Project Site is zoned A1-1XL-H (agricultural zone), and RE40-1 (residential estate), as set forth in the Los Angeles Municipal Code. In the year 2000, the LAMC was revised to identify cemeteries as a public benefit use permitted in any zone or location, unless otherwise restricted, so long as specific performance standards or approved alternative compliance measures are met.

The Land Use Element of the City of Los Angeles General Plan is divided into 35 Community Plans. The Project Site is within the boundaries of the Hollywood Community Plan. The Hollywood Community Plan contains broad objectives and specific policies for land use and development which address commerce, housing, industry, circulation and service systems (recreation and parks, fire protection, public schools, library, other public facilities, and social services). It also includes a public improvement program for circulation features and facilities; recreation, parks and open space areas; and development of other public facilities. The current version of the Hollywood Community Plan, which was adopted in December 1988, designates the Project Site and its immediately surrounding properties as “Open Space.” The Hollywood Community Plan is currently in the process of being updated by the Department of City Planning.

At the regional level, the Project Site is located within the planning area of the Southern California Association of Governments, the region’s federally-designated metropolitan planning organization, and therefore is subject to various plans prepared by that agency. These plans include the Regional Comprehensive Plan and Guide, Compass Blueprint Growth Vision, and the Regional Transportation Plan. The Project Site is located within the South Coast Air Basin and therefore is within the jurisdiction of the South Coast Air Quality Management District. As such, the proposed Project is subject to the South Coast Air Quality Management District’s Air Quality Management Plan. In addition, the Project Site is subject to the Congestion Management Plan for Los Angeles County.

Much of the Project Site is presently developed with cemetery-related uses including a mortuary and flower shop, interment sites, wall crypts/columbaria, cremation garden columbaria, churches (i.e., the Church of the Hills and the Old North Church), and facilities which are used to host special events and programs throughout the year, including the Hall

of Liberty/Museum, and the Plaza of Mesoamerican Heritage. Various operations and maintenance related buildings are also located on the Project Site including an administration building, storage buildings and garages, maintenance yard buildings, water storage tanks and two pump houses. A 150-foot wide transmission easement (granted to the Los Angeles Department of Water and Power) runs diagonally northwest to southeast across the middle of the Project Site between Forest Lawn Drive on the north, and the Santa Monica Mountains on the south. A number of ephemeral streams and basins are present on the Project Site, including Sennett Creek, an existing concrete culvert drainage that directs surface water runoff flow from the Project Site and several off-site tributaries into the Los Angeles River Flood Control Channel. Paved roadways, landscaped areas, and graded undeveloped pads are also present on the Project Site. The remainder of the Project Site is undeveloped.

The Forest Lawn Memorial-Park—Hollywood Hills property is governed by prior entitlements that have been granted by the City. The majority of the Project Site, approximately 410 acres, was originally approved by the City for cemetery use in 1948, pursuant to a conditional use permit. Since the original approval, approximately 30 acres have been added to the Project Site and. Approximately 4.5 acres of the Project Site is not currently permitted by the existing CUP for cemetery use.

Existing land uses surrounding the Project Site include: Mount Sinai Memorial Park; the Los Angeles River Flood Control Channel and the SR 134 Freeway; the administrative offices of the Junior Achievement of Southern California Inc.; and Griffith Park, the Santa Monica Mountains and contiguous undeveloped land owned by the Forest Lawn Memorial-Park Association. The Disney Studios and ABC Studio office buildings are across the SR 134 Freeway to the northwest, and single-family residential uses are located across Forest Lawn Drive and the Los Angeles River Flood Control Channel.

9. Noise

a. Noise

The Project Site is buffered from residential and commercial uses, and many of the property's uses are not visible from off-site, due to the topography of this area. The primary sources of noise at and around the Project Site are associated with traffic along SR 134 and Forest Lawn Drive. Additional secondary sources of noise include construction equipment (tractors and backhoes), and pedestrian and vehicular activity associated with the cemetery operations within the Memorial-Park and the adjacent Mount Sinai Memorial Park.

b. Groundbourne Vibration

Aside from seismic events, the greatest regular sources of groundborne vibration in the vicinity of the Project Site are construction and earthwork activities associated with the operations on the Project Site and the adjacent Mount Sinai Memorial Park. Roadway traffic within the Project Site and the associated movement of soil for grave preparation also are existing vibration sources on site.

c. Sensitive Receptors

Noise-sensitive land use receptors within the vicinity of the Project Site include: (1) Mount Sinai Memorial Park; (2) the look-out point on Mount Hollywood Drive in Griffith Park; (3) single-family residences located north of the SR 134 Freeway; and (4) single-family residences west of the Los Angeles River Flood Control Channel. These noise-sensitive receptors are located at distances ranging from approximately 200 to 3,750 feet from the Project Site.

10. Traffic, Circulation and Parking

a. Traffic and Circulation

The existing street system in the Project area consists of a regional roadway system including freeways, principal and secondary arterials, and collector and local streets. The secondary highways, collectors, and selected local streets in the Project area offer sub-regional and local access and circulation opportunities. These facilities generally provide two to four travel lanes and allow parking on either side of the street.

Primary regional access to the Project area is provided by US 101, SR 134 Freeway, and SR 170. The Project Site is approximately 2.5 miles east of the junction of the US 101, which runs generally southeast-northwest relative to the Project Site, and the SR 134 Freeway, which runs east-west approximately one-tenth of a mile north of the Project Site. US 101 connects with Interstate (I)-405, which runs north-south approximately eight miles west of the Project Site. The Ventura Freeway connects with the I-5, which runs southeast-northwest approximately two miles east of the Project Site, and with SR 2, which runs north-south approximately five miles east of the Project Site.

The major arterials providing regional and sub-regional access to the Project area include Forest Lawn Drive, Zoo Drive, South Buena Vista Street, West Alameda Avenue, West Olive Avenue, and Barham Boulevard.

Forest Lawn Drive provides direct access to the Project Site. The main access into and out of the Project Site is located at Forest Lawn Drive and Memorial Drive. Three minor driveways, one west of the main entrance at Forest Lawn Drive near the westerly edge of the Project Site; one east of the main entrance at Forest Lawn Drive between Memorial Park Drive and Mount Sinai Drive; and one east of Mount Sinai Memorial Park, are closed except for emergencies and maintenance activities.

b. Parking

Off-street parking is currently provided on-site within several surface parking lots and along the network of private drives throughout the Project Site.

11. Public Utilities

a. Wastewater

The Bureau of Sanitation operates four treatment and water reclamation plants: the Hyperion Treatment Plant (HTP), Donald C. Tillman Water Reclamation Plant (TWRP), the Terminal Island Water Reclamation Plant, the City of Los Angeles Regional Sanitary Sewer Systems, and the Los Angeles-Glendale Water Reclamation Plant (LAGWRP).

The wastewater treatment system of the City is divided into two major service areas: the Hyperion Service Area (HSA) and the Terminal Island Service Area (TISA). The Project Site is located within the service area of the HSA. The HSA includes three of the four treatment and water reclamation plants; the HTP, the TWRP and the LAGWRP. When these three facilities are combined, the HSA has a dry weather flow capacity of approximately 550 million gallons per day (mgd) (consisting of 450 mgd at HTP, 80 mgd at TWRP, and 20 mgd at LAGWRP). The TWTP is upstream of the Project Site and would not accommodate wastewater flows from the proposed Project. The LAGWRP is an upstream plant that typically operates at capacity and treats constant flows, since it has the ability to bypass any excess wastewater flow to the HTP for treatment. As such, while the LAGWRP may receive wastewater flows from the Project Site, wastewater flows from the Project Site may also bypass the LAGWRP for treatment at the HTP, depending on daily conditions at the LAGWRP.

As a result, the Project Site is primarily served by the HTP. The HTP is located southwest of the Los Angeles International Airport in Playa del Rey. In 1998, the HTP was upgraded to provide full secondary treatment for all wastewater based on an average dry weather flow of 450 million gallons per day. The HTP currently processes average wastewater flows of approximately 362 million gallons per day, resulting in a remaining capacity of approximately 88 million gallons per day. The treated water from the HTP is

discharged through a 12-foot diameter outfall pipe extending five miles offshore into the Santa Monica Bay and the Pacific Ocean at a depth of 200 feet.

Wastewater flows from existing structures on the Project Site are conveyed to the public sewage system via an on-site network of private sewer lines. The Project Site connects to the public wastewater system within a sewer easement running under Memorial Drive at the northern end of the Project Site (i.e., the Forest Lawn Memorial-Park—Hollywood Hills property main entrance) where the private on-site wastewater line connects to an existing 8-inch public line under Forest Lawn Drive. Wastewater flows are then directed eastward and are conveyed to a 48-inch line in Buena Vista Street, then into a 60-inch line and 48-inch line in the Riverside Drive right-of-way. Wastewater flows then feed into the Mariposa Siphon, before being discharged into a 48-inch line in the Forest Lawn Drive right-of-way. This line, together with the larger network of sewage infrastructure, conveys Project Site wastewater flows to the HTP.

According to the City of Los Angeles Bureau of Sanitation, while the current depth to diameter ratio flow levels in the 8-inch and 48-inch lines in Buena Vista Street and the Riverside Drive right-of-way and the 60-inch line cannot be determined at this time, existing gauging information indicated that the current flow level (d/D) in the 48-inch line on Forest Lawn Drive right-of-way is approximately 25 percent full. The design capacities at d/D of 50 percent are: 229,000 gallons per day for the 8-inch line in Buena Vista Street; 14.93 million gallons per day for the 48-inch line in Buena Vista Street; 14.93 million gallons per day for the 48-inch line in the Riverside Drive right-of-way; 27.07 million gallons per day for the 60-inch line in the Riverside Drive right-of-way; and 30.78 million gallons per day for the 48-inch line in the Forest Lawn Drive right-of-way.

Current wastewater flow level data from the existing on-site uses is not available. However, based upon the estimated water consumption at the Project Site, it is estimated that the existing occupied floor area on the Project Site generates wastewater flows on the order of 21,164 gallons per day (gpd). The proposed Project also utilizes approximately 560,451 gpd of recycled water for landscaping purposes. However, this water is absorbed by landscaping on the Project Site and does enter the City's wastewater conveyance system.

b. Water

The Los Angeles Department of Water and Power (LADWP) provides potable water to the City of Los Angeles and is responsible for ensuring that water demand within the City is met and that State and federal water quality standards are achieved. The City's water supplies are primarily derived from the four following sources: (1) the Eastern Sierra Nevada Mountains via the Los Angeles Aqueduct (LAA) system; (2) local groundwater

basins; (3) purchases from the Metropolitan Water District (MWD); and (4) recycled water. In addition, water storage is essential for the LADWP to supply water during high demand conditions and provide for firefighting and emergencies. The City water system has 108 tanks and reservoirs ranging in size from 10 thousand to 60 billion gallons with a total capacity of 109 billion gallons. Water is distributed through a network of over 7,200 miles of water mains ranging from 4 inches to 120 inches in diameter. Because of the size and range in elevation (0 to 2,400 feet), the system has been divided into 102 pressure zones, with almost 90 booster pumping stations to provide water service at higher elevations.

(1) Domestic Water Supply

The LADWP currently provides domestic water service to the Project Site. Domestic and fire water flow for the existing uses on the Project Site is provided via a low-pressure, 24-inch domestic water main located in Forest Lawn Drive. This main can supply approximately 5,000 gallons per minute (gpm). There is also a high-pressure, 8-inch domestic water main in Forest Lawn Drive that can supply approximately 1,260 gpm fire flow and 400 gpm domestic flow.

The LADWP's domestic water distribution system currently supplying the Project Site lacks adequate water pressure. The available fire flow may also be considered below desirable levels. The static water pressure in the area is 122 pounds per square inch (PSI) maximum and 5 PSI minimum based on a water meter elevation of 480 feet above sea level for the low-pressure domestic water system. The static water pressure in the area is 283 PSI maximum and 209 PSI minimum based on a ground elevation of 517 feet above sea level for the high-pressure domestic water system.

The LADWP is designing a domestic water trunk line to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure.

The Project Site is currently largely developed as a cemetery use and includes approximately 98,679 square feet of occupied floor area within existing structures on the property. Over a six-year history (from 2004 to 2009), the annual average domestic water demand for the Project Site has been approximately 7,724,860 gallons per year, or 21,164 gpd.

(2) Reclaimed Water Supply

The Project Site is also served with reclaimed water by a 16-inch water line in Forest Lawn Drive. Forest Lawn has an agreement with the LADWP for the purchase of recycled water for the Project Site. Pursuant to the agreement, the LADWP delivers reclaimed

water to the Project Site at a maximum peak hour flow rate of 1,500 gpm. The static water pressure in the area is 192 PSI maximum and 34 PSI minimum based on a water meter elevation of 480 feet above sea level for the reclaimed water system.

Based on a six-year history of reclaimed water use at the Project Site, the Forest Lawn Memorial-Park - Hollywood Hills property used an average of 560,451 gpd of recycled water. In limited instances when recycled water is not available, domestic water is used. To provide recycled water capacity, the Project Site includes two on-site private pump stations and two reservoirs, each of which stores approximately 100,000 gallons of reclaimed water.

c. Energy

(1) Electricity

The LADWP provides electricity service to the City of Los Angeles. The LADWP obtains electricity from various generating sources that utilize coal, nuclear, natural gas, hydroelectric, and renewable resources to generate power. In 2006, the percentage of total electricity generated by each fuel type was as follows; 47 percent from coal-fueled units; 30 percent from natural-gas-fired units; 8 percent from large hydroelectric sources; 8 percent from nuclear sources; and 7 percent from eligible renewable sources. In 2006, the LADWP delivered a total of 24,313.51 million kilo-watt hours (kWh) of electricity to its consumers. The LADWP projects that electricity consumption within LADWP's service territory will increase at an average rate of 0.9 percent, or 218.82 million kWh per year for the foreseeable future.

The Project Site is served via LADWP distribution circuits. An overhead 34.5-kV transmission line is adjacent to the Project Site running along Forest Lawn Drive and currently supplies 4,800 volts to the existing Forest Lawn Memorial-Park area. An existing LADWP power line easement traverses the Project Site from northwest to southeast. Existing electricity consumption at the Project Site from 2004 to 2009 ranged from 1,944,800 kWh per year to approximately 2,476,951 kWh per year. The six-year annual average electricity demand at the Project Site is 2,225,663 kWh per year.

(2) Natural Gas

The State of California produces about 13.5 percent of the natural gas it uses. The remaining 86.5 percent is obtained from sources outside of the state: 40 percent from the Southwest, 23.5 percent from Canada, and 23 percent from the Rocky Mountain area. An interstate natural gas pipeline system delivers out-of-state natural gas to California. The five major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline,

El Paso Pipeline, and Mojave Pipeline. However, the availability of natural gas is based upon changing conditions of gas supply and regulatory policies.

The Southern California Gas Company provides natural gas to the City of Los Angeles through existing gas mains located under the streets and public right-of-ways. Natural gas service is provided in accordance with the Southern California Gas Company's policies and extension rules on file with the California Public Utilities Commission at the time contractual agreements are made. As a public utility, the Southern California Gas Company is under the jurisdiction of the Public Utilities Commission, but can also be affected by the actions of federal regulatory agencies.

Natural gas is provided to the Project Site via an existing pipeline infrastructure serving the Project area. Existing natural gas usage from 2004 to 2009 ranged from 3,424,900 to 7,532,600 cubic feet per year. The six-year annual average natural gas usage at the Project Site was approximately 5,325,417 cubic feet per year.

d. Solid Waste

(1) Regional

Landfills within Los Angeles County (County) are generally classified either as Class III landfills, which accept non-hazardous solid waste, or unclassified (inert) landfills, which accept construction and demolition waste, yard trimmings, and earth-like waste. Twelve Class III landfills and three unclassified landfills are located within the County.

Demand for landfill capacity is continually evaluated by County through preparation of the Los Angeles County Integrated Waste Management Plan (CoIWMP) annual reports. The 2008 ColWMP Annual Report, which is the most recent report available, was completed in October 2009. As with previous annual reports, the 2008 CoIWMP Annual Report assesses future landfill disposal needs over a 15-year planning horizon based, in part, on forecasted waste generation and available landfill capacity from 2008 to 2023. Several factors are used in the 2008 ColWMP Annual Report to determine landfill capacity, including: (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirements permits, solid waste facilities permits, and air quality permits), (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries, and (3) operational constraints.

As discussed in the 2008 ColWMP Annual Report, without changes in the status quo, a shortage of permitted solid waste disposal capacity at in-County Class III landfills is projected by 2014. This calculated shortage is due in part to a lack of suitable sites for developing new landfills, and limited expansion potential of existing landfills. Nonetheless,

the 2008 ColWMP Annual Report anticipates that future disposal needs can be adequately met through 2023 via scenarios that include some combination of the following: (1) use of existing in-County Class III landfills and transformation facilities; (2) proposed expansion of in-County Class III landfill capacity through new or existing facilities; (3) use of out-of-County landfills for disposal, including waste-by-rail facilities; (4) use of conversion technologies; (5) expansion of diversion infrastructure; and (6) maximization of waste reduction and recycling.

(2) City of Los Angeles

Within the City of Los Angeles, solid waste management, including collection and disposal services and landfill operation, is administered by the City of Los Angeles Bureau of Sanitation and private companies. Refuse from single-family residential and limited multi-family residential uses on public streets is collected by the Bureau of Sanitation. Waste generated by the majority of multi-family residential sources and all commercial and industrial sources is collected by private contractors. Construction waste is also collected by private contractors. Various transfer and disposal facilities, the majority of which are located within the City, are used to manage the remaining solid waste not diverted from the solid waste stream.

Waste disposal sites or landfills which accept waste generated within the City of Los Angeles are owned and operated by the County of Los Angeles Sanitation District ("County"), as well as by private companies. In addition, transfer stations are used to temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills.

Over 75 percent of the City solid waste in 2008 was disposed of at two facilities, the Chiquita Canyon Landfill and the Sunshine Canyon Landfill. A portion of the Sunshine Canyon Landfill operates within the City of Los Angeles, while the remainder of the landfill operates within unincorporated Los Angeles County. Although the Sunshine Canyon Landfill operates in two separate jurisdictions, the landfill operates as one entity. The Chiquita Canyon Landfill is also under County jurisdiction, located in the unincorporated community of Castaic, approximately 33 miles northwest of the Project Site. As Class III landfills, the Chiquita Canyon and Sunshine Landfills accept all types of non-hazardous solid waste. As of April 2010, the Chiquita Canyon Landfill currently accepts an average of 4,822 tons per day and, therefore, has a remaining daily capacity intake of 1,178 tons per day. As of December 2008, the combined Sunshine Canyon City/County Landfill has a maximum permitted disposal rate of 12,100 tons per day. The Sunshine Canyon City/County Landfill currently accepts approximately 5,949 tons of waste per day and, therefore, has a remaining daily capacity intake of 6,151 tons. As such, these two landfills have a remaining daily permitted intake of 7,329 tons per day.

While the Chiquita and Sunshine Canyon City/County Landfills provided for approximately 75 percent of the City's Class III solid waste disposed of at in-County landfills in 2008, the Antelope Valley, Lancaster and Calabasas Landfills provided for the remaining 25 percent of the City's Class III solid waste disposed of at in-County landfills. Based on data from the 2008 ColWMP Annual Report, as of December 2008, the estimated remaining capacity of all of the in-County Class III landfills serving the City of Los Angeles is 119.57 million tons.

In addition, there are two solid waste transformation facilities within Los Angeles County. The Commerce Refuse to Energy Facility disposed of approximately 0.102 million tons of solid waste in 2008 and has a permitted capacity of 1,000 tons per day. Further, waste-by-rail has the potential to create substantial solid waste disposal capacity. Waste-by-rail systems allow the County to transport waste via existing railways to remote out-of-County disposal facilities.

Inert wastes such as soil, concrete, asphalt, and other construction and demolition debris are disposed of at the County's three unclassified landfills. As of December 2008, the estimated remaining disposal capacity for unclassified landfills serving the County is estimated at approximately 57.215 million tons. In 2008, approximately 0.176 million tons of inert wastes were disposed of at these three County unclassified landfills. Two of these unclassified landfills, the Azusa Land Reclamation landfill and Peck Road Gravel Pit serve the City of Los Angeles. These two landfills have an estimated remaining capacity of 56.95 million tons based on the 2008 ColWMP Annual Report. Thus, unclassified landfills serving the City and County generally do not face capacity issues.

(3) On-Site Generation

Currently, solid waste generated at the Forest Lawn Memorial-Park – Hollywood Hills property from ongoing activities includes office waste products (i.e., paper), earth materials and concrete associated with interment site preparation, and green waste generated from ongoing landscape maintenance activities. Green waste generated from ongoing landscape maintenance activities within the Forest Lawn – Memorial-Park property is generally reprocessed and is either reused for landscape mulch, or taken to a facility where it can be recycled, mixed and sold. Therefore, green waste generated from the site is not included within the estimate of solid waste generated by existing development. Total existing solid waste generation at the Forest Lawn Memorial-Park - Hollywood Hills property is conservatively estimated to be approximately 2,253 pounds per day.

12. Public Services

a. Fire Protection

(1) Facilities and Equipment

Fire prevention, fire suppression, and life safety services in the City of Los Angeles are provided by the City of Los Angeles Fire Department (LAFD), as governed by the Safety Element of the Los Angeles City General Plan, adopted November 26, 1996, as well as the Fire Code in the Los Angeles Municipal Code. The Safety Element and Fire Code serve to guide City departments, government offices, developers and the public for the construction, maintenance and operation of fire protection facilities located within the City.

The LAFD has 3,586 uniformed personnel and 353 non-uniformed support staff. Services of the LAFD include fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education and community service. A professionally trained staff of 1,104 firefighters (including 242 paramedic-trained personnel) is on duty at all times at 106 neighborhood fire stations located across the LAFD's 471 square-mile jurisdiction.

The Project Site is located within the LAFD's Division 1, Battalion 5 which serves Hollywood, Los Feliz, and Griffith Park. Existing fire stations that currently serve the Project Site include LAFD Station No. 76 located at 3111 North Cahuenga Boulevard, Fire Station No. 86 located at 4305 Vineland Avenue in Studio City, and Fire Station No. 56 located at 2759 Rowena Avenue in Silver Lake. Water for fire flows for the area surrounding the Project Site is provided and maintained by the LADWP. All water mains and lines that are designed and sized according to LADWP standards take into account fire flow and pressure requirements.

Response distance relates directly to the linear travel distance (i.e., miles between a station and a site) and the LAFD's ability to successfully navigate the given accessways and adjunct circulation system. The Fire Code specifies the maximum response distances recommended between specific sites and the nearest fire station, based on land use and fire flow requirements. Pursuant to Section 57.09.07A of the LAMC, the maximum response distance between residential land uses and an LAFD fire station that houses an engine or truck company is 1.5 miles; while for a commercial land use, the distance is 1.0 mile for an engine company and 1.5 miles for a truck company. When response distances exceed these recommendations, all habitable structures must be equipped with automatic fire sprinkler systems and any other fire protection devices deemed necessary by the Fire Chief (e.g., fire signaling systems, fire extinguishers, smoke removal systems). The Project Site receives primary fire protection and paramedic service from LAFD Station

No. 76, located at 3111 North Cahuenga Boulevard in the Cahuenga Pass, approximately 2.8 miles southwest of the Project Site.

(2) Fire Flow

In general, the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). Fire flow is normally measured in gallons per minute (gpm), as well as the duration of the fire flow. City-established fire flow requirements generally vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In any instance, a minimum residual water pressure of 20 pounds per square inch (PSI) is required to remain in the water system while the required gpm is flowing.

Water for fire flows for the area surrounding the Project Site is provided and maintained by the LADWP. All water mains and lines that are designed and sized according to LADWP standards take into account fire flow and pressure requirements.

As discussed above, there are two water mains located in Forest Lawn Drive; a low pressure, 24-inch water main that can supply approximately 5,000 gpm and a high-pressure, 8-inch water main that can supply 1,260 gpm fire flow and 400 gpm domestic flow. The static water pressure in the area is 122 PSI maximum and 5 PSI minimum based on a water meter elevation of 480 feet above sea level for the low-pressure domestic water system. The static water pressure for the high-pressure domestic water system is 283 PSI maximum and 209 PSI minimum based on a ground elevation of 517 feet above sea level. In addition, the LADWP is designing a potable water trunk line along Forest Lawn Drive to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will increase both the fire and domestic water flow and pressure.

(3) Wildland Fire Hazards

The Project Site abuts hillside areas within Griffith Park and the Santa Monica Mountains to the east, south, and west. The Project Site itself is characterized with hillsides, terraced hills, and some generally flatter areas, and is located within a Very High Fire Hazard Severity Zone, as designated by the City of Los Angeles. Forest Lawn Drive provides direct access, including emergency access, to the Project Site. As such, the Project Site is subject to brush clearance regulations enforced by the LAFD. “Brush clearance” is a term that describes the process of treating or thinning vegetation to reduce fire hazards and to provide a defensible space around an existing structure.

(4) Emergency Access

The main access into and out of the Project Site is located at Forest Lawn Drive and Memorial Drive. Emergency access is currently also provided by three subsidiary driveways, which are closed except for emergencies and maintenance activities: one west of the main entrance at Forest Lawn Drive near the western edge of the Project Site; one east of the main entrance at Forest Lawn Drive between Memorial Drive and Mount Sinai Drive; and one east of Mount Sinai Memorial Park.

III. Environmental Setting

B. Related Projects

CEQA requires that Environmental Impact Reports analyze "cumulative impacts," defined in the State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is:

> the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines, Section 15355[b]).

The cumulative impacts analysis considers the anticipated impacts of the proposed Project along with reasonably foreseeable growth. According to CEQA Guidelines Section 15130(b)(1), reasonably foreseeable growth may be based on:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.

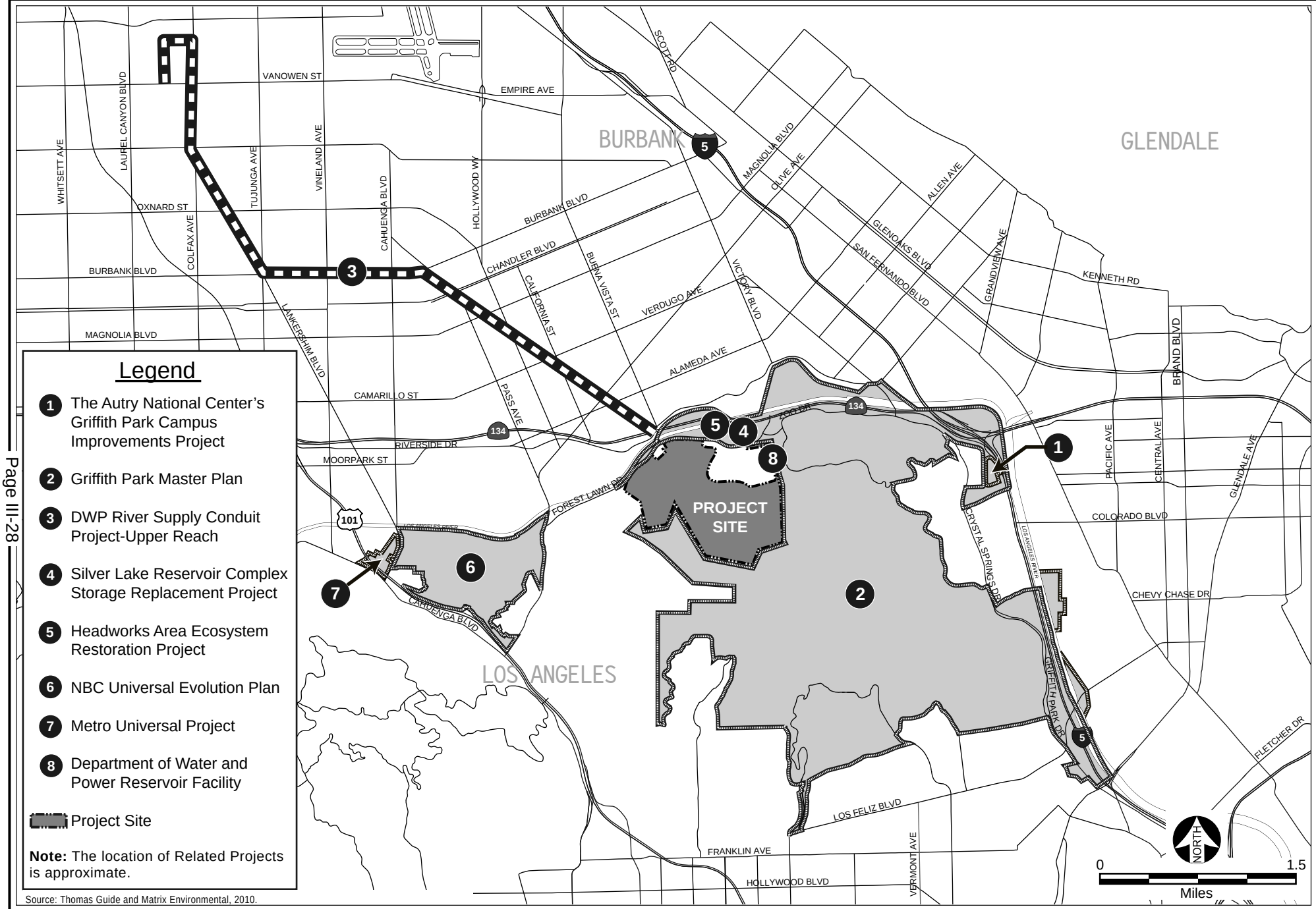
Cumulative study areas are defined based on an analysis of the geographical scope relevant to each particular environmental issue. Therefore, the cumulative study area, and related projects contained within it, for each individual environmental impact issue may vary. For example, a cumulative visual impact generally could only affect the area within the viewshed of the Project Site, while a cumulative air quality impact could affect the entire South Coast Air Basin. The specific boundaries, and the related projects within those boundaries, for the cumulative study area of each environmental issue, are identified in the applicable environmental issue section in Section IV, Environmental Impact Analysis, of this Draft EIR. To allow consideration of the contributions of present and reasonably foreseeable projects that are of similar character and would potentially affect similar environmental issues, the cumulative impact analysis presented in this Draft EIR is based on the following list of related projects as derived from sources including building and

entitlement application records from the City of Los Angeles Department of City Planning, the Department of Recreation and Parks, the Department of Water and Power, and the Department of Public Works. The general location of the related projects in relation to the Project Site is provided in Figure III-1 on page III-28.

1. *The Autry National Center's Griffith Park Campus Improvements Project:* The Autry National Center proposes to renovate and modernize portions of its 11.93 acre Griffith Park Campus located at 4700 Western Heritage Way, in two phases. Phase 1 would include expansion of the existing Campus Building by adding 79,000 gross square feet to provide new and reconfigured galleries, exhibition and collection storage areas and education classrooms, and a new community room; rearrangement of the surface parking facilities; and pedestrian access and landscape improvements. Phase 2 would include construction of a 50,000 gross square foot Institute Building that would contain a reading room, collection storage rooms, and staff work areas; and construction of a semi-subterranean parking facility beneath the Institute Building.

2. *Griffith Park Master Plan:* The Griffith Park Master Plan proposes an update to the original 1978 Plan for Griffith Park, located at 4730 Crystal Springs Drive in Los Angeles, and includes a comprehensive physical plan and management program for the approximately 4,210 acre Park that addresses both the problems of the present and the expectation of the future. Based on the primary management principle of preserving and restoring natural resources and ecosystems, and enhancing the Park's natural qualities, the Plan's goal is to establish a unique Urban Wilderness identity for Griffith Park which fosters a visitor experience that is apart from urban infringements. The Master Plan includes objectives, policies, and design guidelines to govern the ongoing maintenance and improvements to Griffith Park's facilities and maintain the Park's Urban Wilderness identity.

3. *River Supply Conduit Project – Upper Reach:* The Los Angeles Department of Water and Power proposes to construct a new larger Upper Reach pipeline to replace the existing River Supply Conduit pipeline (which is more than 50 years old) in a new alignment. The project would involve construction of approximately 5.92 miles of 78-inch diameter welded steel underground pipeline and associated appurtenant structures such as maintenance/access holes, flow meters, valves, vaults, and air-vacuum release valves. Construction would occur within existing street rights-of-way, LADWP property, existing and new easements, and recreation areas in the City of Los Angeles and Burbank. This pipeline would be installed using methods including open-trench/jacking/tunneling. The proposed pipeline route would extend from the North Hollywood pump station to the west



Source: Thomas Guide and Matrix Environmental, 2010.

matrix environmental

Figure III-1
Related Projects Location Map

end of the Headworks Spreading Grounds along Forest Lawn Drive. The Headworks Spreading Grounds site is located to the north of the Project Site across Forest Lawn Drive on the south bank of the concrete lined Los Angeles River Flood Control Channel.

4. *Silver Lake Reservoir Complex Storage Replacement Project:* The LADWP's Silver Lake Reservoir Complex Storage Replacement Project, also known as Headworks, will be comprised of a new reservoir tank and a small hydro-electric power plant to harness the energy of the water flowing into the tank to be located at the Headworks Spreading Grounds. The remaining land at the site will be restored as natural wetlands by the Army Corps of Engineers, with hiking trails, streams and natural landscaping. The Headworks Spreading Grounds site is located immediately to the north of the Project Site across Forest Lawn Drive on the south bank of the concrete lined Los Angeles River Flood Control Channel.

5. *Headworks Area Ecosystem Restoration Project:* The Los Angeles Department of Water and Power and the U.S. Army Corps of Engineers are jointly evaluating alternatives to restoring a functional riparian habitat and ecosystem at the Headworks Spreading Grounds site. Opportunities under consideration are (1) environmental restoration, including development of a wetland or restoration of riparian habitat; and (2) development of passive recreation opportunities to complement nearby parks and facilities. This project is independent from the Silver Lake Reservoir Complex Storage Replacement Project and is expected to occur following completion of the reservoir.

6. *NBC Universal Evolution Plan:* The NBC Universal Evolution Plan, proposed for the 391-acre NBC Universal property located in Universal City, proposes the development of approximately 2.01 million square feet of various net new commercial uses, including a 500-room hotel and related hotel facilities. In addition, the Project proposes 2,937 multi-family residential units. The project proposes new development across all of the major types of land uses that occur on the project site, including CityWalk, theme park, tram tour, studio, production, retail, office and hotel uses, in addition to the introduction of residential uses. The proposed new development would be supported by additional parking facilities and improvements to the on-site circulation system.

7. *Metro Universal Project:* The Metro Universal Project, located at 3875 N. Lankershim Boulevard in Los Angeles, proposes the development of approximately 1.47 million square feet of new commercial and possible residential uses in two phases. Phase 1 would include a 655,200 square-foot office and 315,000 square-foot media production complex with up to 1,929 parking spaces, and a separate parking garage with up to 1,780 parking

spaces, which would include park & ride spaces for Metro patrons. Phase 1 would also include up to 25,000 square feet of retail/restaurant facilities. Phase 2 would include a 489,100 square-foot office building or a mixed-use residential/hotel building with 400 residential units, 300 hotel rooms and ancillary meeting rooms, restaurant/lounge areas, spa space and residential amenities. Up to 1,467 parking spaces would be provided. The project would also include new bus drop-off, transfer and layover facilities associated with the Metro Red Line station.

8. *Department of Water and Power Reservoir Facility:* The City of Los Angeles Department of Water and Power proposes construction of a recycled water reservoir facility and associated water distribution lines. The proposed reservoir would be located in the vicinity of Forest Lawn Memorial-Park, Mount Sinai Memorial Park, and Griffith Park.

The cumulative contribution of past projects is included in the description of Environmental Setting presented above in this Section, and in Section IV, Environmental Impact Analysis, of this Draft EIR.

The State CEQA Guidelines Section 15130 identify that the discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone . . . [and] should be guided by the standards of practicality and reasonableness" Accordingly, and in consideration of the above, the analysis of cumulative impacts is presented in Section IV, Environmental Impact Analysis, of this Draft EIR.

IV. Environmental Impact Analysis

A. Aesthetics

1. Introduction

This section analyzes potential Project impacts on aesthetics, views, and light and glare. As aesthetics refers to the overall visual quality of an area or given field of view, the analysis of aesthetics focuses on the proposed Project's visual relationship with existing and planned land uses in the Project area. The analysis considers visual character aspects, such as design, size, shape, color, texture, and general composition of aesthetic features, as well as the relationships between these elements. It also considers both natural and man-made/urban features with aesthetic value. The adverse visual quality impacts considered within the analysis include the loss of existing valued aesthetic features and the introduction of contrasting features that contribute to a decline in overall visual character (e.g., the introduction of contrasting features that overpower familiar features, eliminate context or associations with history, or create visual incompatibility where there may have been apparent efforts to maintain or promote a thematic or consistent character).

The analysis of views assesses the proposed Project's potential impacts on visual access to visual resources (e.g., mountain ranges, ridgelines, historic buildings, etc.). It considers the proposed Project's distance from visual resources, the topography of the Project area, and existing view obstructions. The analysis considers both focal views (i.e., views of a particular object, scene, setting, or feature of visual interest) and panoramic views or vistas (i.e., views of a large geographic area for which the view may be wide and extend into the distance). Existing public and private viewpoints which have views of the Project Site were identified and considered to execute this analysis. Further, a number of issues pertaining to development projects, such as building height and mass, are considered as they directly relate to view obstruction and visual character.

The analysis of light impacts assesses the effects of Project nighttime light from both point sources (i.e., illuminated signage, street light poles, vehicle headlights, building illumination) and indirect sources (i.e., reflected light) on light sensitive land uses, such as adjacent streets, residential properties, and area public parks. These land uses are recognized as light sensitive because they are typically occupied by persons that have expectations for privacy during evening hours and who are subject to disturbance by bright light sources.

Glare is a primarily daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Glare generation is typically related to sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. In the case of the Project Site, glare is predominantly produced by light reflecting off of parked vehicles. The analysis of glare assesses potential impacts on glare-sensitive uses, such as residences and transportation corridors (i.e., roadways).

As discussed in Section V, General Impact Categories, of this Draft EIR, the proposed Project would not introduce structures tall enough to cast shadows beyond the Project Site's boundaries. As such, shade/shadow impacts are not analyzed in this section.

2. Environmental Setting

a. Project Site

The Project Site is an approximate 444-acre site located at the base of the Santa Monica Mountains. The Project Site is located between a highly developed urban area and the undeveloped Santa Monica Mountains and Griffith Park. The Project Site is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel, the SR-134 Freeway, the Junior Achievement of Southern California, Inc. and the Mount Sinai Memorial Park on the north and northeast; Griffith Park on the south and east; and adjacent undeveloped property owned by Forest Lawn on the west, respectively. These adjacent uses to the north and northeast buffer the Project Site from residential and commercial uses located across Forest Lawn Drive and the Los Angeles River Flood Control Channel, and many of the Project Site's existing buildings and structures are not visible from off-site locations due to the site's topography. An aerial photograph depicting the Project Site and the immediate surrounding land uses is provided in Figure II-2, Aerial Photograph in Section II, Project Description, of this Draft EIR.

Existing views of the Project Site and surrounding properties are presented in Figures IV.A-1 through IV.A-15 on pages IV.A-3 through IV.A-17. Currently, much of the Project Site is developed with cemetery-related uses, including interment sites within the landscaped Memorial-Park (see Views 1, 2 and 3 on Figure IV.A-1 on page IV.A-3, Views 4 and 6 on Figure IV.A-2 on page IV.A-4, and View 8 on Figure IV.A-3 on page IV.A-5), the Courts of Remembrance wall crypts/columbaria (see View 13 on Figure IV.A-5 on page IV.A-7), Lincoln Terrace (see View 19 on Figure IV.A-6 on page IV.A-8), the administration/



View 1: View of the entrance of Forest Lawn Memorial-Park – Hollywood Hills facing south towards the Project Site.



View 2: View facing southwest from Ascension Road looking at interment sites at Forest Lawn Memorial-Park – Hollywood Hills. The Santa Monica Mountains and undeveloped areas of the Project Site can be seen in the background.



View 3: View facing south from Memorial Drive looking at interment sites within Forest Lawn Memorial-Park – Hollywood Hills. Existing grading and the Santa Monica Mountains can be viewed in the background.

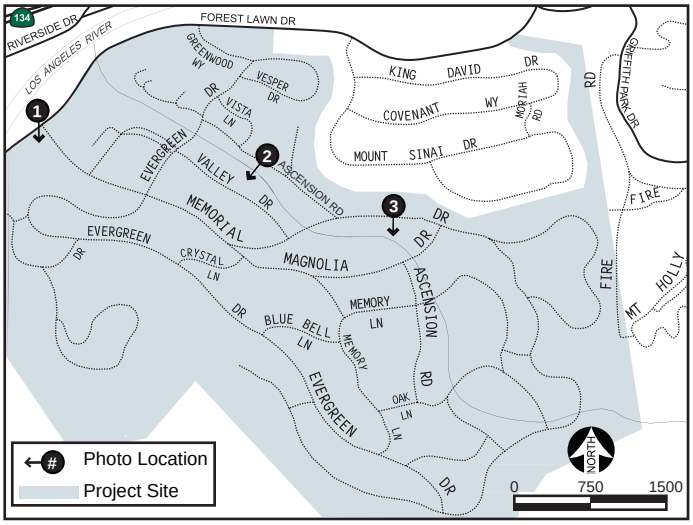


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 4: View facing south from the eastern side of the Project Site with interment sites in the foreground.



View 5: View facing north from the eastern side of the Project Site with fencing around a portion of Mount Sinai Memorial Park on the left.



View 6: View facing east from Magnolia Drive with views of interment sites in the foreground.

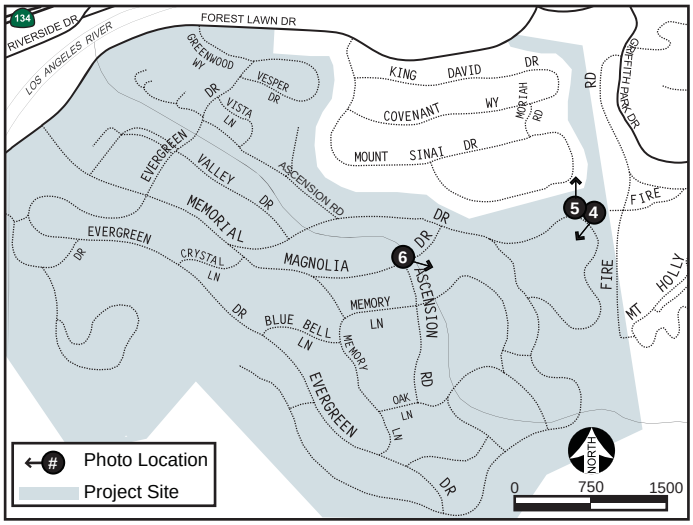


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 7: View facing west on the Project Site, with views of the Hall of Liberty in the foreground, and the Santa Monica Mountains in the background.



View 8: View from Forest Lawn Drive across the Project Site facing southwest, with interment sites in the foreground.



View 9: View facing east across the Project Site, with the Old North Church in the foreground and the Santa Monica Mountains beyond.

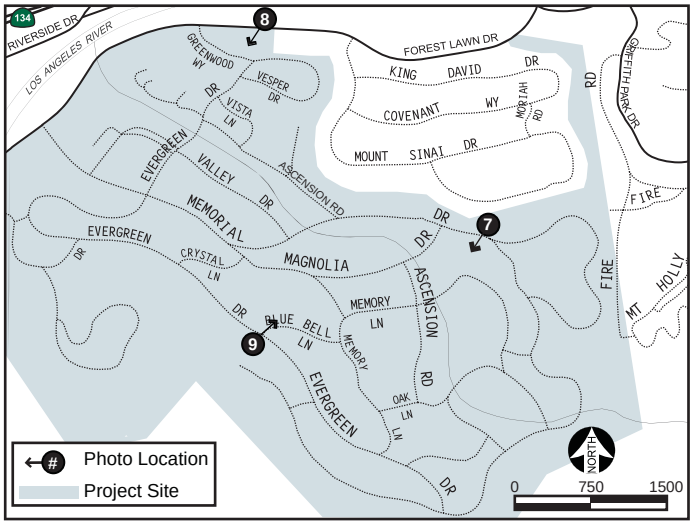


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 10: View facing west from Evergreen Drive on the southern portion of the Project Site.



View 11: View looking south from Ascension Road at Magnolia Drive.



View 12: View looking northwest from Memorial Drive towards Burbank. Existing interment sites can be viewed in the foreground.

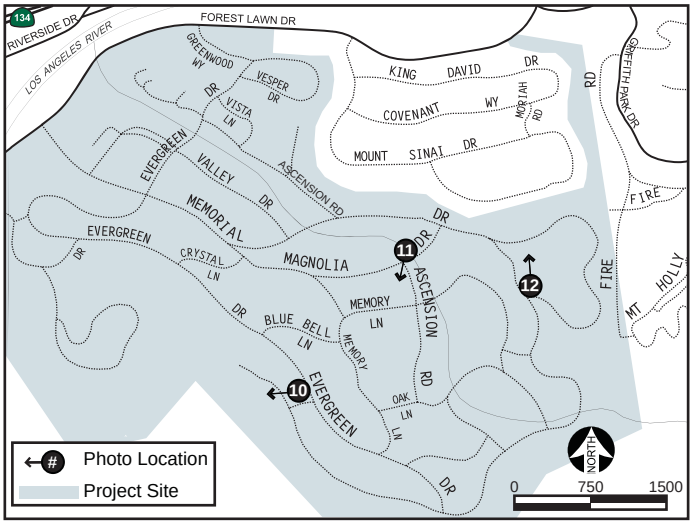


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 13: View looking south from within the Courts of Remembrance Wall Crypts/Columbaria.



View 14: View looking northwest from within the Woodlands Cremation Garden Columbaria.



View 15: View looking west from Valley Drive at the Church of the Hills.

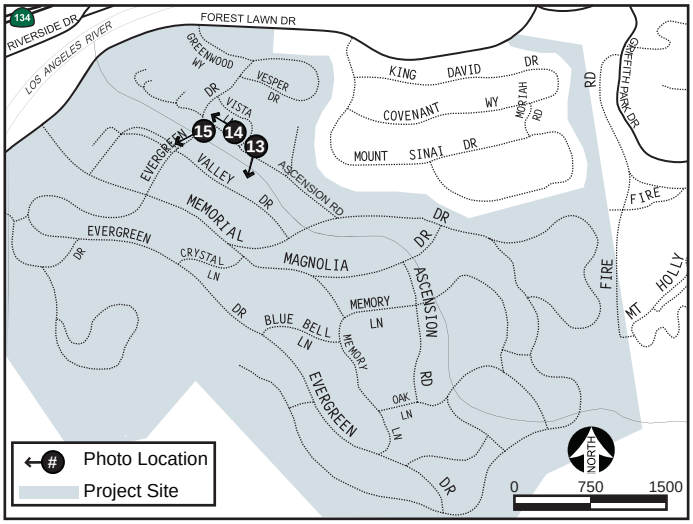
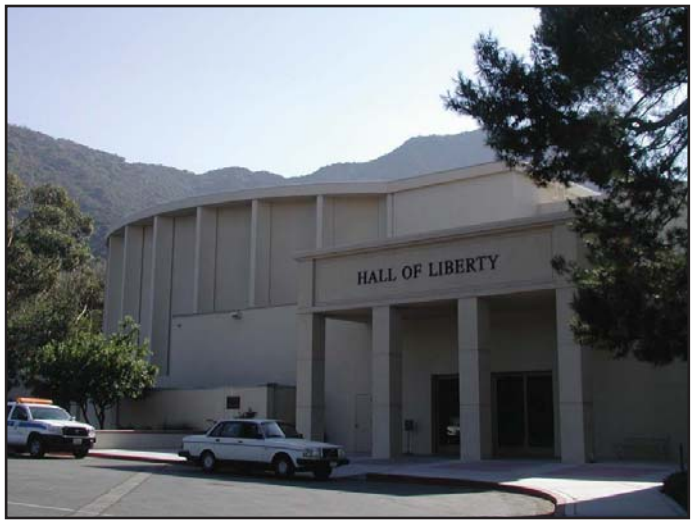


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 16: View looking northwest at the Hall of Liberty.



View 17: View within the Plaza of Mesoamerican Heritage.



View 18: View looking east from Memorial Drive at the Administration/Mortuary/Flower Shop building.



View 19: View looking west from Memory Lane at the Lincoln Terrace.

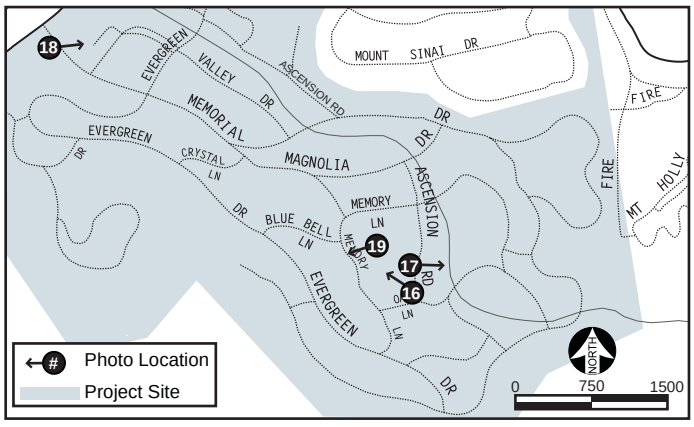


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.

matrix environmental

Figure IV.A-6
Views of the Project Site
Views 16, 17, 18 and 19



View 1: View looking south across Forest Lawn Drive at the Junior Achievement Foundation building. The entrance to Forest Lawn Memorial-Park – Hollywood Hills appears at the far right.



View 2: View looking south across Forest Lawn Drive at the entrance to Mount Sinai Memorial Park.

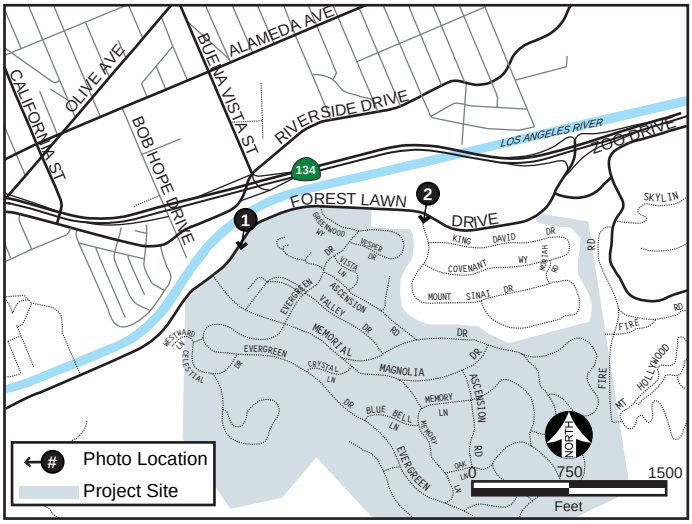


PHOTO LOCATION MAP

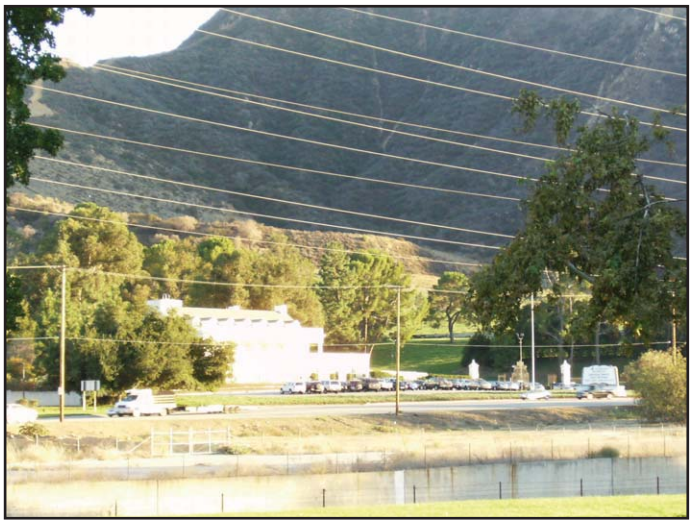
Source: Matrix Environmental, 2010.



View 1: View looking southeast across Riverside Drive, the Los Angeles River, and Forest Lawn Drive at the Project Site from the west end of Buena Vista Park.



View 2: View looking southeast across the Los Angeles River and Forest Lawn Drive at the Project Site from a mid-point in Buena Vista Park.



View 3: View looking southeast across the Los Angeles River and Forest Lawn Drive from the east end of Buena Vista Park.

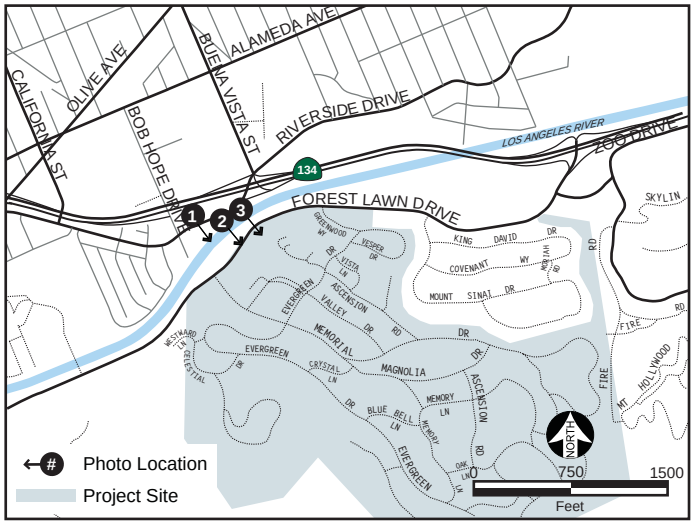
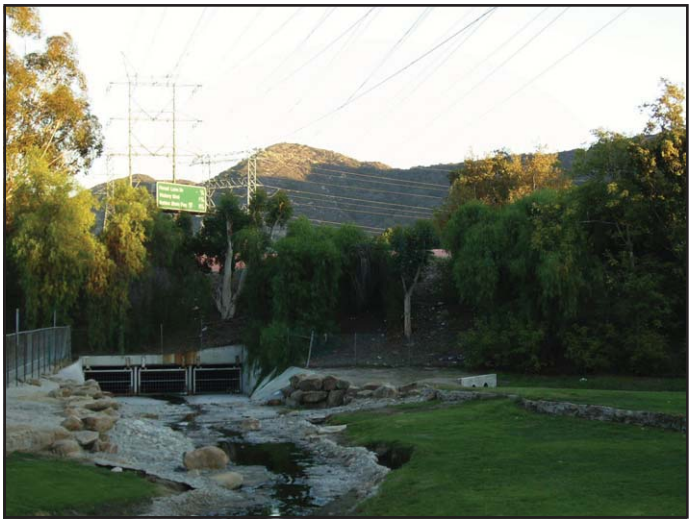


PHOTO LOCATION MAP

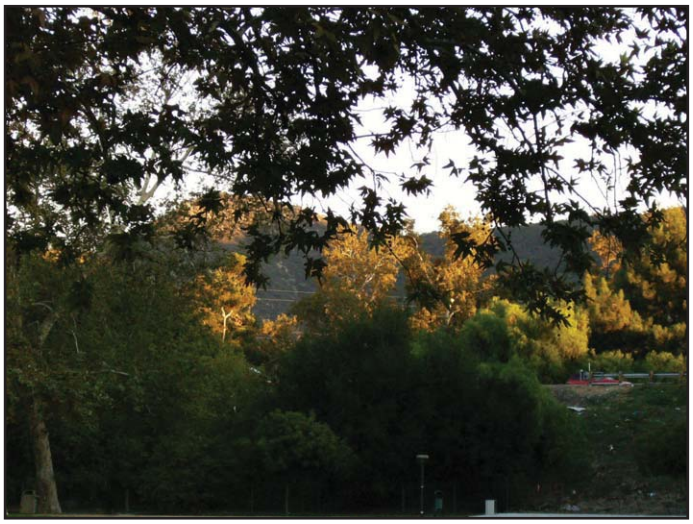
Source: Matrix Environmental, 2010.



View 1: View looking southeast across the CA 134-Ventura Freeway in the direction of the Project Site from the southeast corner of Johnny Carson Park.



View 2: View looking southeast across the CA 134-Ventura Freeway in the direction of the Project Site from the southern edge of Johnny Carson Park.



View 3: View looking southeast across the CA 134-Ventura Freeway in the direction of the Project Site from the southwest corner of Johnny Carson Park. Dense foliage can be seen along the CA-134 Ventura Freeway.

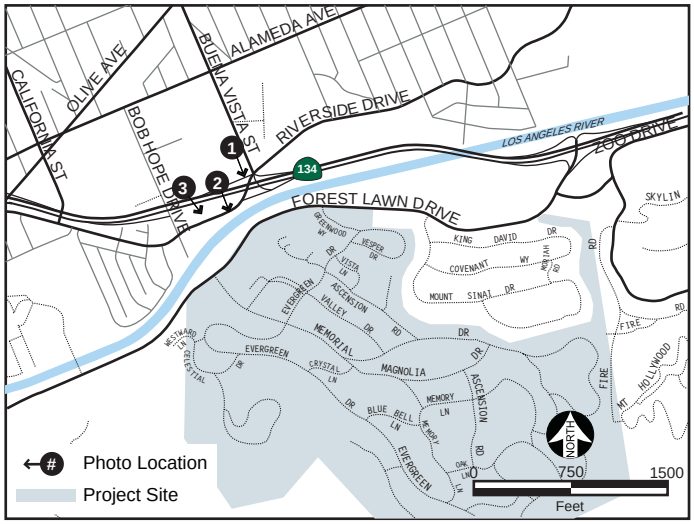
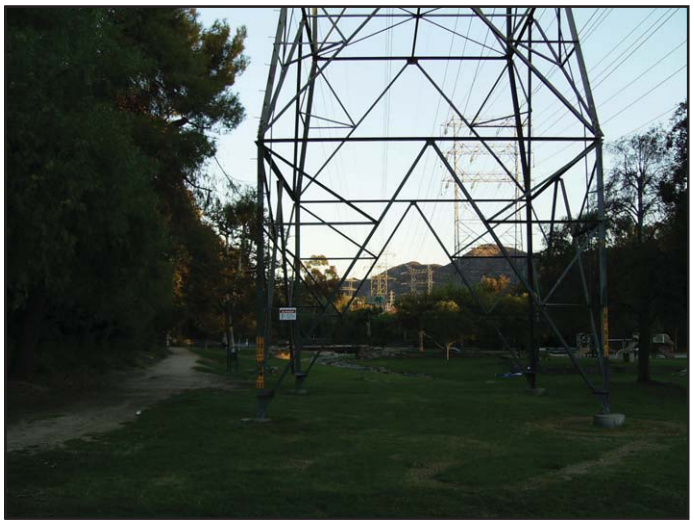


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 4: View looking southeast across Johnny Carson Park in the direction of the Project Site with the ridgeline of the Santa Monica Mountains in the background.



View 5: View looking southeast in the direction of the Project Site from the middle of Johnny Carson Park. An electricity transmission line can be seen in the foreground.



View 6: View looking southeast in the direction of the Project Site through the tree canopy at Johnny Carson Park.



View 7: View looking southeast in the direction of the Project Site through an electricity transmission line and the tree canopy at Johnny Carson Park.

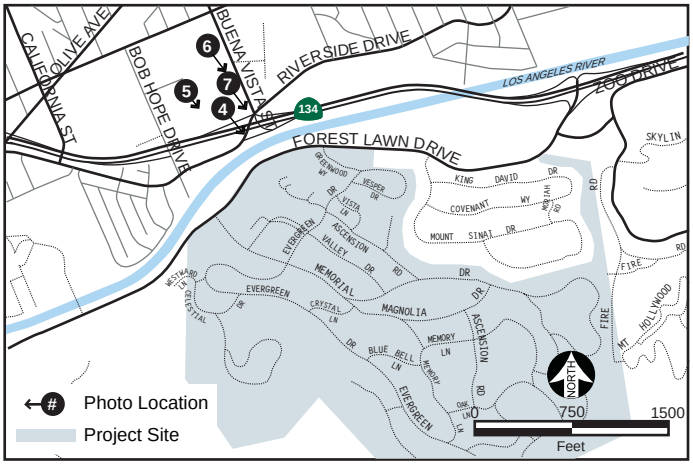


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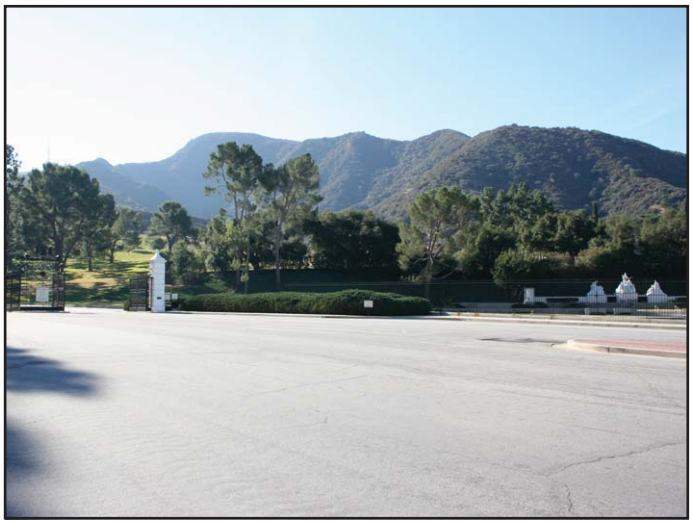
Source: Matrix Environmental, 2010.



View 1: View looking northeast along Forest Lawn Drive at the landscaping and interment sites within Forest Lawn Memorial-Park – Hollywood Hills (center and center right).



View 2: View looking northeast along Forest Lawn Drive at the grounds within Forest Lawn Memorial-Park – Hollywood Hills.



View 3: View looking southeast across Forest Lawn Drive at the gateway entrance to Forest Lawn Memorial-Park – Hollywood Hills (left) and the Diana Group sculpture (right). The Santa Monica Mountains can be viewed in the background.

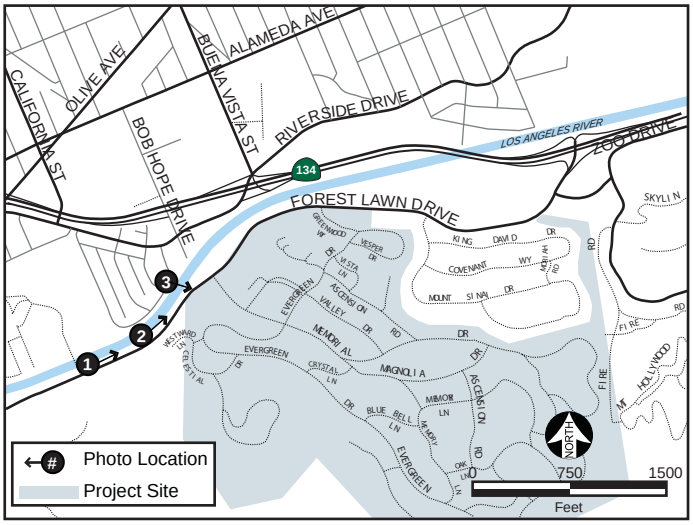


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 4: View looking south across Forest Lawn Drive at the bronze heron fountain located on the right side of the gateway entrance to Forest Lawn Memorial-Park – Hollywood Hills.



View 5: View looking southwest down Forest Lawn Drive at the entrance to Forest Lawn Memorial-Park – Hollywood Hills (far right) with the Junior Achievement Foundation building in the foreground (left) and the Santa Monica Mountains in the background.



View 6: View looking south across Forest Lawn Drive at the Junior Achievement Foundation building and the Santa Monica Mountains in the background.

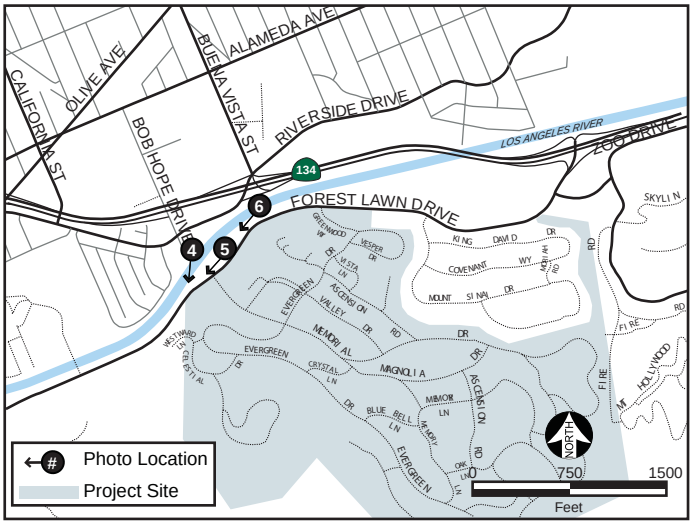


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 7: View looking southwest along Forest Lawn Drive from the entrance to Griffith Park. Mount Sinai Memorial Park can be seen in the center foreground with the Santa Monica Mountains in the background.



View 8: View looking southwest from the landscaped entrance to Griffith Park.



View 9: View looking east at the landscaped entrance to Griffith Park.

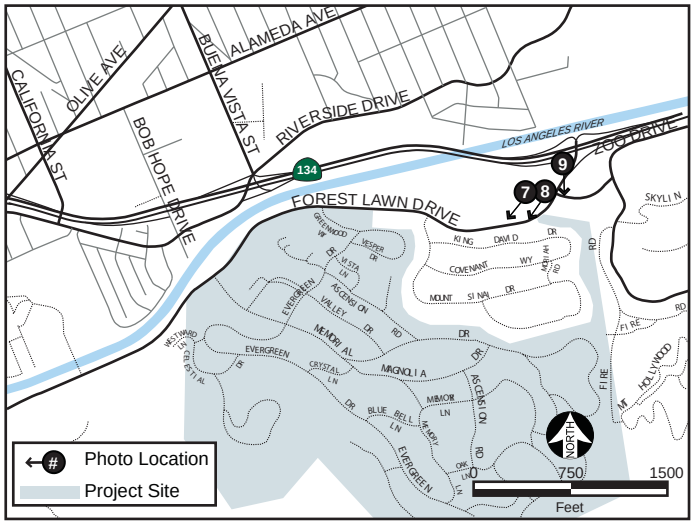


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 1: View looking south down Buena Vista Street at the Project Site from a location just south of Olive Street.



View 2: View looking south down Buena Vista Street at the Project Site from a point just north of the intersection of Buena Vista Street and Alameda Avenue.



View 3: View looking south across the CA 134-Ventura Freeway at the Project Site from a point just north of the intersection of Riverside Drive and Buena Vista Street.

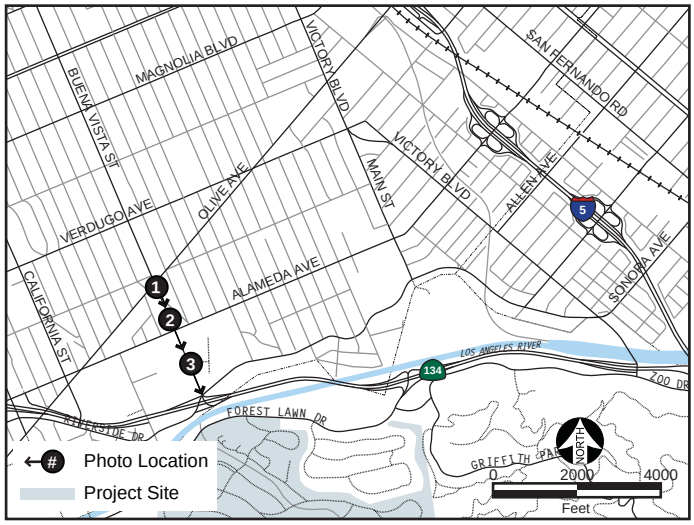


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 1: View looking southeast in the direction of the Project Site and the Santa Monica Mountains from the I-5 Golden State Freeway just north of Alameda Avenue.



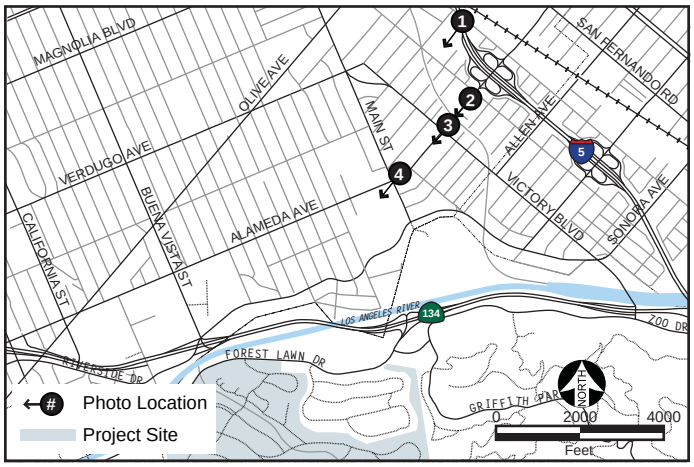
View 2: View looking southeast down Alameda Avenue in the direction of the Project site from a point just north of the intersection of Alameda Avenue and Victory Boulevard.



View 3: View looking southeast down Alameda Avenue in the direction of the Project Site from the intesection of Alameda Avenue and Victory Boulevard.



View 4: View looking southwest down Alameda Avenue in the direction of the Project Site from a point just south of the intersection of Alameda Avenue and Main Street.



Source: Matrix Environmental, 2010.

PHOTO LOCATION MAP

matrix environmental

Figure IV.A-15
Views of the Project Site from the I-5 Freeway and W. Alameda Avenue
Views 1, 2, 3 and 4

mortuary/flower shop building (see View 18 on Figure IV.A-6), the Church of the Hills (see View 15 on Figure IV.A-5), and the Old North Church (see View 9 on Figure IV.A-3), and facilities which host events and services throughout the year, including the Hall of Liberty/Museum (see View 16 on Figure IV.A-6), and the Plaza of Mesoamerican Heritage (see View 17 on Figure IV.A-6). Various operations and maintenance related buildings are also located throughout the property, including a storage building and garage, maintenance yard buildings, three reservoirs and two pump houses.

As can be seen on Figure II-2, Aerial Photograph, in Section II, Project Description, paved roadways and landscaped areas, as well as previously graded pads exist throughout the Project Site. The remainder of the Project Site is undeveloped. Portions of the Project Site's undeveloped areas have been disturbed by past development and continued grading efforts for Interim Projects. For instance, the Project Site's West Area includes the location of a former granite quarry and surface mining operations unrelated to Forest Lawn Memorial-Park. Upon cessation of the mining operations, a reclamation plan was approved and implemented. The reclamation plan was designed to visually blend the graded area into the existing natural terrain. Nonetheless, unvegetated soil, terraces, and sediment controls are visible from vantage points within the Project Site and from vantage points in Griffith Park (i.e., Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel). Similarly, grading has occurred on the eastern portion of the Project Site in connection with Interim Projects and as part of cemetery operations (refer to Section II, Project Description, of this Draft EIR). Like the grading on the West Area of the Project Site, this area of grading contains unvegetated soil, terraces, and sediment controls and is visible from vantage points within the Project Site and from vantage points in Griffith Park. All other undeveloped areas of the Project Site consist of natural slopes and native vegetation. It is important to note that due to topography, vegetation, and urban structures, the majority of the Project Site graded areas, southern boundary, and base of the Santa Monica Mountains are not visible from vantage points north of the Project Site.

b. Surrounding Properties

The area surrounding the Project Site is characterized by two distinctly different settings. The urbanized environment around the Project Site includes the developed area of the City of Burbank to the north. The Santa Monica Mountains, including Griffith Park, provide a backdrop for the remainder of the Project Site to the south and east, and adjacent undeveloped property owned by Forest Lawn on the west. Adjacent to the north of the Project Site is Mount Sinai Memorial Park, which contains cemetery-related uses (see View 2 on Figure IV.A-7 on page IV.A-9). Further north of the Project Site, across Forest Lawn Drive, are the Los Angeles River Flood Control Channel and the SR-134 Freeway. The administrative offices for the Junior Achievement of Southern California, Inc. are located immediately northwest, adjacent to the entrance of the Project Site (see View 1 on Figure IV.A-7). Beyond the SR-134 Freeway to the northwest is the City of Burbank,

which includes the Disney Studios and the NBC studio office buildings. Also included in the City of Burbank, to the northwest across Forest Lawn Drive and the Los Angeles River Flood Control Channel, are single-family residential homes. The Warner Bros. Studios lie just west of this single family neighborhood on the south side of the SR-134 Freeway. A portion of the Warner Bros. Studios property is located along Forest Lawn Drive and south of the SR 134 Freeway and the Los Angeles River Flood Control Channel. The Santa Monica Mountains generally bound the Project Site to the southeast, south, and west, and include the Griffith Park property, which is located immediately adjacent to the south and east of the Project Site, and adjacent undeveloped property owned by Forest Lawn on the west. These uses surrounding the Project Site are shown on Figure II-2, Aerial Photograph, in Section II, Project Description, of this Draft EIR.

c. Existing Visual Character and Viewsheds

Visual character refers to the area's unique or important natural geologic features, the fabric and identity of the built environment, and the view points or corridors which provide visual access to either. Unique or important geologic features may include elements such as vegetation, horizon, topography, geologic formations, wetlands, rivers or other water features. The built environment further contributes to an area's identity. Urban design characteristics are comprised of buildings, streets, districts, landmarks and open spaces. These characteristics are defined by building bulk, use and type; block form and street pattern; and streetscape elements and street hierarchy. When development takes place, features may be affected and existing views may be obstructed or blocked due to modification of the environment (e.g., grading, landscaping, building construction, etc.). Conversely, modifications to the existing environment also have the potential to create or enhance view opportunities to both public and/or private viewsheds.

Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than private views. Private views are those which can be seen from vantage points located on private property.

As discussed above, the Project Site is located between two distinct visual areas, the southern portions of the developed San Fernando Valley to the north and the undeveloped Santa Monica Mountains to the south and east. The undisturbed portions of the Project Site are generally characterized by hillsides, terraced hills, and generally level areas. The areas of the Project Site that are developed are professionally landscaped and incorporate shrubbery, flower gardens, ornamental trees, and native oak trees such that the property is compatible with the surrounding undeveloped terrain. As mentioned above, the Project Site's West and East Areas are undeveloped, but are in various stages of grading, and the visual character of these two areas is defined by unvegetated soil, terraces, and sediment controls.

The area surrounding the Project Site was visually surveyed to identify locations where prominent public views of the Project Site were available, and thus could be affected by the proposed Project. Three public open space locations, two of which are located directly north of the Project Site, were identified. These two locations north of the Project Site are Buena Vista Park, located on Riverside Drive, and Johnny Carson Park, located further to the north of Buena Vista Park. The public location south and east of the Project Site includes vantage points in Griffith Park, which are discussed in greater detail below. Views of the Forest Lawn Mortuary and Flower Shop on the Project Site, as well as the adjacent hillside areas within the Project Site can be seen from Buena Vista Park, due to its location directly north of the Project Site across Riverside Drive, the Los Angeles River Flood Control Channel, and Forest Lawn Drive, with no intervening structures or features to block the view (see Views 1, 2, and 3 on Figure IV.A-8 on page IV.A-10). However, the Project Site is not visible from Johnny Carson Park due to the low elevation standpoints in Johnny Carson Park, combined with the dense year-round tree canopy that lines the 134 Freeway (see Views 1 through 7 on Figures IV.A-9 and IV.A-10 on pages IV.A-11 and IV.A-12).

Forest Lawn Drive (from Barham Boulevard to Griffith Park Drive), a Major Class II Highway, is designated as a scenic highway in the City of Los Angeles General Plan Transportation Element. It is situated at a lower elevation than the Project Site. The viewshed along Forest Lawn Drive is characterized by a winding road along the northern base of a portion of the Santa Monica Mountains, the gateway entrance to the Project Site (see Views 1, 2, and 3 on Figure IV.A-11 on page IV.A-13 and View 4 on Figure IV.A-12 on page IV.A-14), the Junior Achievement of Southern California, Inc. (see Views 5 and 6 on Figure IV.A-12 and View 1 on Figure IV.A-7 on page IV.A-9), Mount Sinai Memorial Park (see View 2 on Figure IV.A-7 on page IV.A-9, and View 7 on Figure IV.A-13 on page IV.A-15), and the entrance to Griffith Park (see Views 8 and 9 Figure IV.A-13).

Although the Project Site lies within the viewshed of a scenic highway, public views of the Project Site are limited from Forest Lawn Drive due to the Project Site's topography and on-site landscaping in relation to Forest Lawn Drive. For example, with the exception of the central part of the Project Site's northern boundary, east-west trending hills traverse the northern portion of the Project Site, just south of Forest Lawn Drive. These hills rise at a grade and elevation substantial enough to obstruct the view of the majority of the Project Site from Forest Lawn Drive. The grade and height of these hills also obstructs views of the base of the Santa Monica Mountains from Forest Lawn Drive. In these areas, Forest Lawn Drive offers views of manicured lawn, headstones, and landscaping along the slope of the hill facing Forest Lawn Drive. In the central part of the Project Site's northern boundary, near the Forest Lawn Memorial-Park – Hollywood Hills property entrance, the Project Site is flat and the Site's foreground is visible from Forest Lawn Drive. This area contains some of the Project Site's notable built features, including the Mortuary and Flower Shop and the Heron Fountain. Even in this location, mature landscaping, existing

structures, and the Project Site's topography obstruct mid-ground and background views of the Project Site, as well as the base of the Santa Monica Mountains. Existing site improvements and landscaping on the Project Site contribute to the visual character of the viewshed areas along this scenic highway.

In general, the Project Site is intermittently viewed from street level vantages to the north within the Burbank community, with a somewhat limited number of elevated standpoints and street alignments at greater distances affording limited public views of the Project Site. These locations include roadways such as Buena Vista Street as it approaches the SR-134 Freeway, (see Views 1, 2, and 3 on Figure IV.A-14 on page IV.A-16), and the segment of West Alameda Avenue between the Interstate-5 Freeway and Victory Boulevard (see Views 2, 3, and 4 on Figure IV.A-15 page IV.A-17). The Project Site is also visible from the Interstate-5 (I-5) Freeway (see View 1 on Figure IV.A-15). Because the I-5 Freeway is located at a higher elevation than the surrounding street network, the Project Site has a greater level of visibility from this location, as compared to other lower vantage points closer to the Project Site. Thus, elevated vantage points such as those from the I-5 Freeway would be expected to provide distant public views of the Project Site. Views from freeway vantages would, however, be intermittent and limited because freeway views are often obstructed as the vehicles move along the highway at high rates of speed.

Additionally, public views of the Project Site are available from several locations immediately to the east and south, within Griffith Park. Griffith Park is characterized by rugged, chaparral-covered hillsides and canyons, and features a network of roadways and trails. Views of the Project Site are available from a limited number of vantage points within Griffith Park due to topography and natural vegetation. The public vantage points of the Project Site from Griffith Park include Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel. Specifically, the Project Site is visible from several vantage points along Mount Hollywood Drive (see Views 1, 2, and 3 on Figure IV.A-16 on page IV.A-22), a steep, heavily winding road used primarily by hikers and cyclists; from several vantage points along the Toyon Trail (see Views 1 and 2 on Figure IV.A-17 on page IV.A-23), a single-track trail used by hikers that roughly parallels Mount Hollywood Drive at a higher elevation on the eastern side of the Project Site; Mt. Lee (see Views 1 and 2 of Figure IV.A-18 on page IV.A-24), one of the peaks of the Santa Monica Mountains that includes a communications center and a public view point affording views of the San Fernando Valley; and from Mount Chapel (see Views 1 and 2 of Figure IV.A-19 on page IV.A-25), another peak of the Santa Monica Mountains and public viewpoint offering views of the San Fernando Valley.



View 1: View looking west across the Forest Lawn Hollywood Hills Memorial Park from Mount Hollywood Drive. Portions of the East Area of the Project site can be seen in the left of the photograph.



View 2: View looking west across Project Site from Mount Hollywood Drive. Central area of Project Site is in foreground.



View 3: View looking north across Central and East Areas of project site from elevated portion of Mount Hollywood Drive. Mount Sinai Memorial Park is visible in the background.

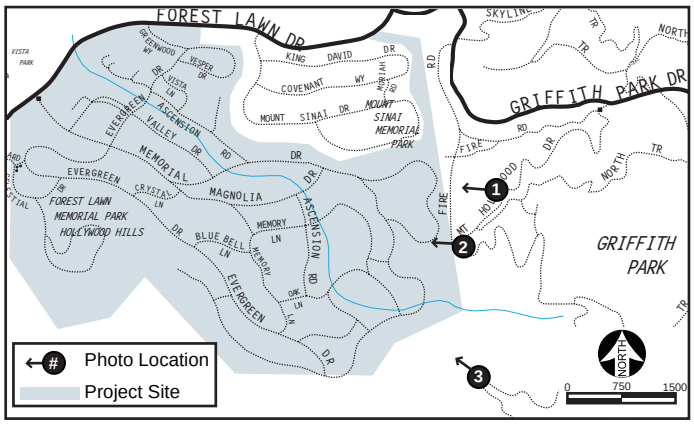


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 1: View towards Forest Lawn from a viewpoint on the Toyon Trail. The travel town tank is in the foreground.



View 2: View towards Forest Lawn from a viewpoint on the Toyon Trail. This is the first point along the trail when hiking towards the north where Forest Lawn Master Plan development areas are visible.

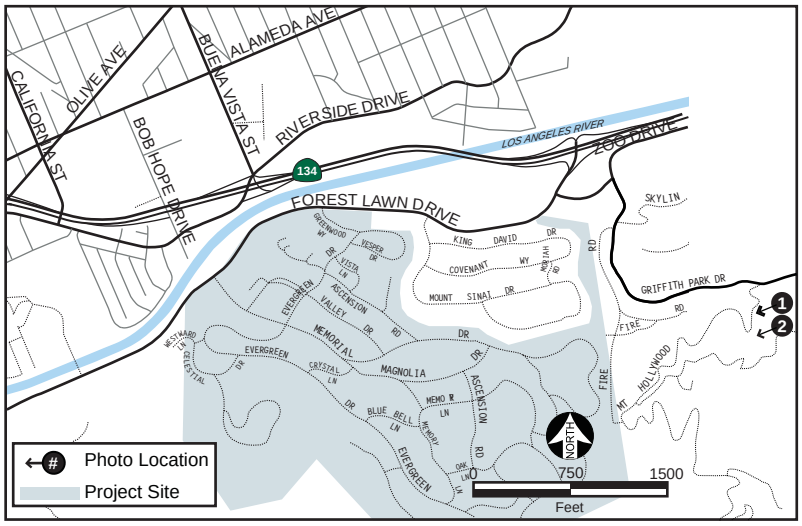


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 1: View to the northeast from Mount Lee.



View 2: View to the north from Mount Lee.

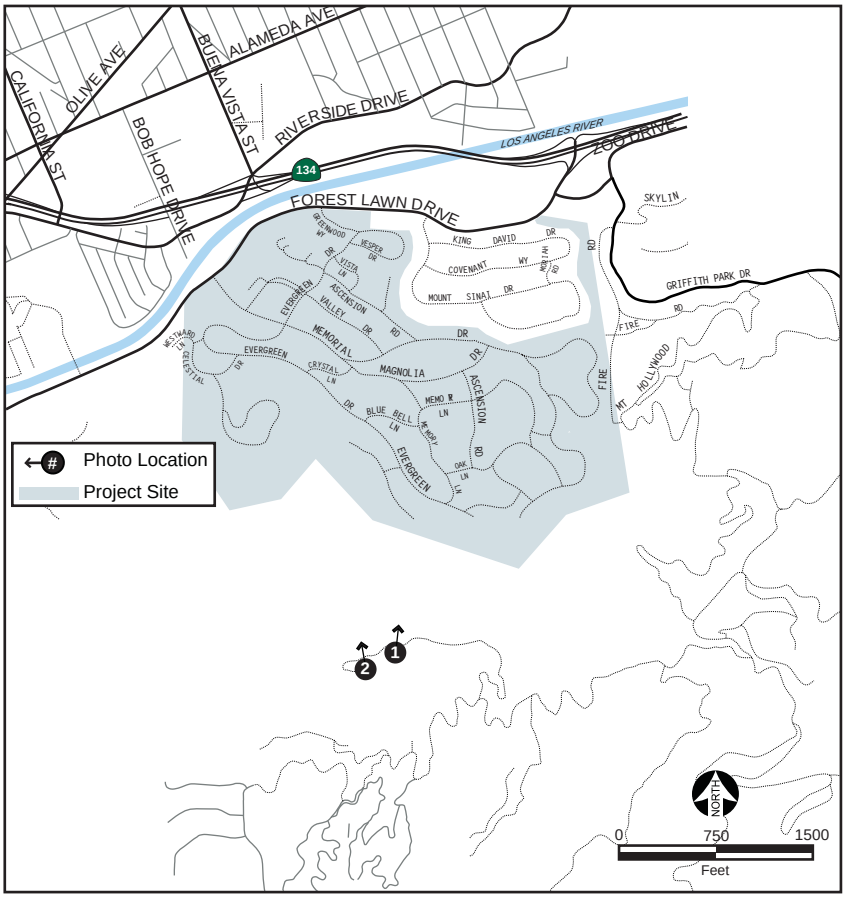


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.



View 1: View to the northwest from Mount Chapel.



View 2: View to the northwest from Mount Chapel.

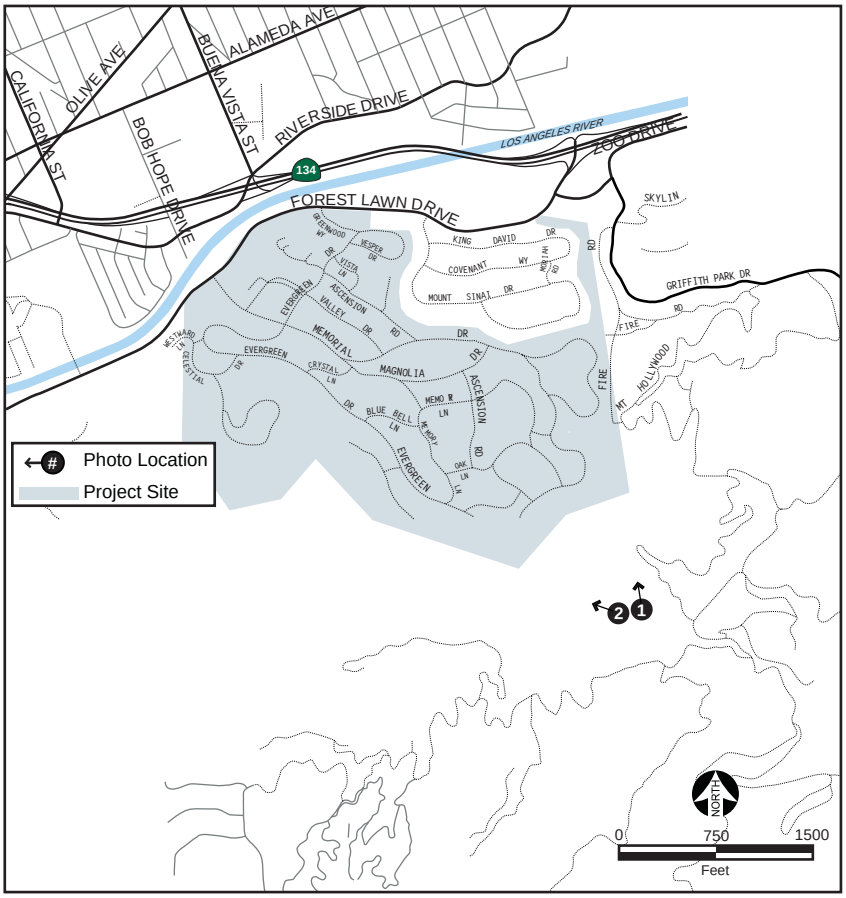


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.

When considering views from Mount Hollywood Drive, which is elevated above the Project Site, the steep topography and canyons, as well as the extent of mature vegetation adjacent to the roadway, substantially limits the visibility of the portions of the Project Site closest to the roadway (i.e., along the Project Site's East Area); however, the remainder of the Project Site is visible along the vast majority of Mount Hollywood Drive, including the existing graded areas and the Project's Central and West Areas. Similarly, views from the Toyon Trail are somewhat obstructed by topography and native vegetation, although there are segments of the trail (particularly along the trail's southwestern extent) where the majority of the Project Site is visible from the trail. Regarding views from Mount Lee, the Project Site's southern boundary and West Area are largely obstructed from view by the area's topography and mature vegetation. However, the Project Site's developed areas, as well as the Project Site's Central and West Areas are visible from Mount Lee. A similar condition exists at Mount Chapel, where the Project Site's southern boundary and Central Area are largely obstructed from view by the area's topography and mature vegetation. However, the Project Site's developed areas, as well as the Project Site's East and West Areas are visible from Mount Chapel. The Project's East Area is a prominent visual feature from the Mount Chapel vantage point.

Private views of the Project Site are available from the southeast edge of Mount Sinai Memorial Park at its interface with a small section of the Project Site (See Views 1 and 2 on Figure IV.A-20 on page IV.A-27). Currently, the combined effect of a grade separation between the two properties (i.e., higher elevation of the ground surface on the Mount Sinai side of the property line) and the absence of any intervening structures, landscape or ridgelines, enables unobstructed private views across the eastern section of the Project Site.

d. Light & Glare

Nighttime lighting and daytime glare are common throughout the City of Los Angeles and urbanized areas in general. Nighttime lighting is generated from interior lighting in buildings, exterior security and street lighting, and headlights from vehicles either traveling along the adjacent streets or parking on surrounding streets. If a project introduces new light sources, ambient nighttime illumination levels may increase. Additionally, nighttime spillover of light onto adjacent properties has the potential to interfere with certain functions, including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. The significance of the impact depends on the type of use affected, proximity to the affected use, the intensity of the light source, and the existing ambient light environment. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and institutional uses, and natural areas.



View 1: View looking south from southern boundary of Mount Sinai Memorial Park at East Area of Project Site.



View 2: View looking south from Mount Sinai Drive at East Area of Project Site.

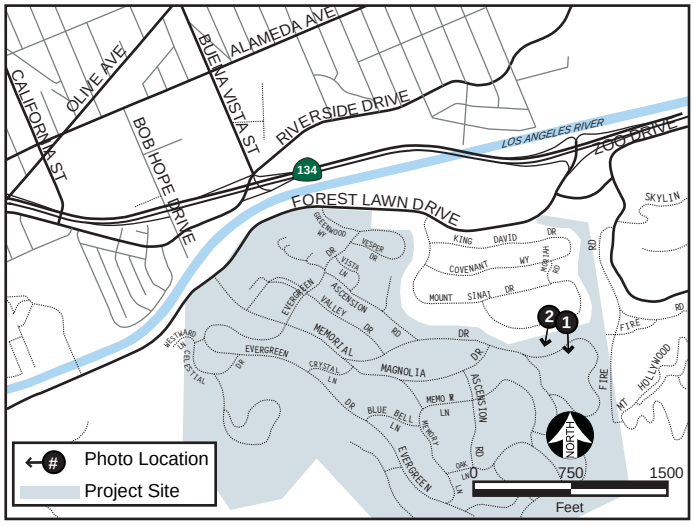


PHOTO LOCATION MAP

Source: Matrix Environmental, 2010.

Glare is generally caused by reflective surfaces on buildings, particularly multi-story buildings with glass windows or other reflective siding. Excessive glare not only restricts visibility but increases the ambient heat reflectivity (i.e., albedo) in a given area.

(1) Existing Nighttime Lighting

The Project area provides relatively low levels of ambient nighttime lighting, most of which is generated from the surrounding street network including Forest Lawn Drive. Nighttime lighting along these corridors is generated by street lights; vehicle headlights; and architectural lighting, security lighting, and building illumination (light emanating from the interior of structures through windows) from surrounding studio, commercial office, and residential uses.

Existing uses on the Project Site generate a moderate amount of lighting from security, signage, and parking. Additionally, the Forest Lawn Memorial-Park - Hollywood Hills property hosts several nighttime events and services throughout the year (e.g., at the Hall of Liberty and auditorium), which may generate additional temporary nighttime lighting. Because soil is occasionally removed from the Project Site after dark pursuant to the existing haul route permit, headlights on trucks traveling on-site can contribute to the Project Site's existing lighting sources.

(2) Existing Daytime Glare

As mentioned above, glare is a common phenomenon in the Southern California area due mainly to the high occurrence of a direct sunlight combined with the highly urbanized nature of the region. This often results in a large concentration of potentially reflective surfaces. Excessive glare not only restricts visibility but increases the ambient heat reflectivity (i.e., albedo) in a given area. Most glare in the Project area is generated by reflective materials on the surrounding commercial buildings and from vehicles passing on the surrounding street network. Minimal glare is currently generated on the Project Site itself. Specifically, the surface parking areas which can be the source of glare (from reflective surfaces on cars) are located near the entrance of the Memorial Park, near Forest Lawn Drive on the southern portion of the Project Site. This area is shielded from public view. The vast majority of the Project Site is generally landscaped, thus it does not contribute to glare.

e. Sensitive Land Uses

The Project Site is used by patrons and visitors throughout the year for outdoor funeral services and cemetery-related uses, as well as special community and cultural events hosted at facilities within the Memorial-Park including the Hall of Liberty/Museum, the Old North Church, the Plaza of Mesoamerican Heritage, and the Church of the Hills.

The grounds within the Memorial-Park are subject to various degrees of lighting from vehicle headlights and low-level ambient lighting sources for safe vehicle and pedestrian access points and security. Due to the topography of the Project Site, as well as the surrounding land uses, the Project Site is not typically susceptible to lighting impacts from other properties. Because all activities within the Project Site are coordinated and controlled by Forest Lawn, the Project Site is not considered a sensitive land use. However, uses that would be considered sensitive to substantial light or glare may include visitors to Mount Sinai Memorial Park or Junior Achievement of Southern California, Inc., located immediately north of and adjacent to the Project Site, and Griffith Park to the south. No other land and glare sensitive land uses were identified due to the topography of the Project Site, as well as the distance to the non-residential surrounding land uses to the north across the SR 134 Freeway.

The Mount Sinai Memorial Park is used by patrons and visitors throughout the year for outdoor funeral services. The grounds within Mount Sinai Memorial Park are subject to various degrees of lighting from vehicle headlights and vehicle and pedestrian access points. The Junior Achievement property is an administrative office run by the Junior Achievement of Southern California, Inc., a non-profit organization that educates students about work readiness, entrepreneurship and financial literacy through experiential, hands-on programs. Generally speaking, Mount Sinai Memorial Park and Junior Achievement are closed to employees and/or visitors after dusk, and would thus not be affected by the Project's lighting after dusk, which would be minimal in any event. Griffith Park is generally closed after dusk and visitors would not be affected by the Project's lighting after dusk. However, Griffith Park is a natural open space area which supports native flora and fauna of the Santa Monica Mountains. For this reason, the open space areas to the south are considered sensitive to the Project's nighttime lighting, as the Project's lighting could affect nocturnal species within the Griffith Park boundaries. Such impacts to wildlife species are discussed in Section IV.C, Biological Resources, of this Draft EIR.

f. Regulatory Setting

(1) Federal and State Regulations

No Federal guidelines/regulations have been identified that govern issues pertaining to aesthetics. New development requires lighting for occupancy and safe use of the facilities. Lighting within new development areas is required to meet California Building Code minimum values for safety at egress paths and stairs, streets, and parking. Public safety and general liability considerations require more illumination than these code minimums in order to prevent accidents and deter criminal activity. Lighting for activities and functional uses within developments is customarily designed to meet the recommended illuminance values defined by the Illuminating Engineering Society of North America (Recommended Illuminance Guidelines).

(2) Local Guidelines/Regulations

(a) General Plan Framework Element

The Citywide General Plan Framework Element (General Plan Framework), adopted in December 1996 and readopted in August 2001, establishes the conceptual basis for the City's General Plan. The General Plan Framework provides direction as to the City's vision for future development in the Project vicinity and includes an Urban Form and Neighborhood Design chapter to guide the design of future development. The General Plan does not directly address cemeteries and their relationship to surrounding uses, but rather focuses general neighborhood design policies and implementation programs that guide local planning efforts for urban development within the City.

Also within the General Plan Framework, the Open Space and Conservation Chapter calls for the use of open space to enhance community and neighborhood character. The policies of this chapter recognize that private open space can define the visual character of an area and should be considered during development. Specifically, Policy 6.1.6 encourages development to consider the preservation of private land open space to the maximum extent feasible. In areas where open space values determine the character of the community, development should occur with special consideration of these characteristics.

(b) Los Angeles Municipal Code

Locally, while the City of Los Angeles Planning and Zoning Code Hillside Grading regulations (Section 12.21-A.17) are indicated in the Project Site's zoning designation, they would not be applicable to the proposed Project as residential development is not proposed.

The City of Los Angeles regulates lighting with respect to building and safety, transportation, and light trespass. The City enforces the building code requirements of the California Building Code and the California Electrical Code which stipulate minimum light intensity values for exterior walkways, stairs, alleys, and roads designated as paths of egress from occupied buildings. The City of Los Angeles Planning and Municipal Code includes the lighting requirements listed in Section 12.21, General Provisions, paragraph A.5.k. Further, LAMC Section 93.0117 requires that on-site lighting be designed and installed so that light levels at the property line do not exceed two (2) foot-candles.

The City's Protected Tree Ordinance also regulates the relocation or removal of all native oak trees (excluding scrub oak), California black walnut trees, California sycamore trees, and California Bay trees of at least four inches diameter at breast height (dbh). The Ordinance prohibits, without a permit, the removal of any regulated protected tree including

"acts which inflict damage upon root systems or other parts of the tree..." and requires that all regulated protected trees that are removed be replaced on at least a two-to-one basis with trees that are of a protected variety. Replacement trees must be at least 15 gallons or larger, measure one inch or more in diameter at a foot above the base, and measure at least seven feet in height from the base. The size and number of replacement trees shall approximate the value of the tree to be replaced. The City also requires that a report be prepared by a tree expert discussing the subject tree(s), their preservation, effects of proposed construction, and mitigation measures pursuant to the removal or replacement thereof. However, trees that have been planted as part of a tree planting program are exempt from this Ordinance and are not considered protected.

3. Environmental Impacts

a. Methodology

The analysis of visual quality/aesthetics considers the visual quality of the area immediately surrounding the Project Site and the impacts of the Project with respect to the existing aesthetic environment. The analysis considers the physical aspects of the proposed Project, as well as an evaluation of simulated composite photographs showing existing and future conditions at representative locations.

The analysis of views evaluates the changes to existing views that may result from development of the proposed Project. The intent of the analysis is to determine if valued view resources are visible in the Project area and whether visual access to such resources would be blocked, diminished, or negatively altered as a result of the proposed Project. The analysis further considers whether the Project would enhance viewing conditions through the creation of new resources. In general, views are closely tied to topography, vegetation, urban structures, and distance from a view resource. The identification of available views within the Project area was accomplished through field surveys, photographic documentation, and topographic analysis. The analysis is based on the Project's characteristics, particularly existing topography, vegetation, proposed building heights and massing, and an evaluation of simulated composite photographs showing existing and future conditions at representative locations, as viewed from a range of distances and variety of directions relative to the Project Site.

The analysis of light and glare identifies the location of off-site light-sensitive land uses and describes the existing ambient lighting conditions in the Project area. The analysis evaluates the Project's proposed light and glare sources and the extent to which Project lighting, including illuminated street lights and architectural illumination, may spill off the Project site onto off-site light-sensitive uses. In addition, the analysis considers the

potential for sunlight to reflect off of building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles or other activities.

As discussed above and in Section V, General Impact Categories, of this Draft EIR, the proposed Project would not introduce structures tall enough to cast shadows beyond the Project Site's boundaries. As such, shade/shadow impacts are not analyzed in this section.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to aesthetics. These questions are as follows:

Would the project:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?
- Substantially degrade the existing visual character or quality of the site and its surroundings?
- Create a new source of substantial light and glare which would adversely affect day or nighttime views in the area?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA* Thresholds *Guide* states that the determination of significance shall be made on a case-by-case basis, considering the following factors:

(1) Aesthetics/Visual Quality

- The amount or relative proportion of existing features or elements that substantially contribute to the valued visual character or image of a neighborhood, community, or localized area, which would be removed, altered, or demolished;
- The amount of natural open space to be graded or developed;
- The degree to which proposed structures in natural open space areas would be effectively integrated into the aesthetics of the site, through appropriate design, etc.;

- The degree of contrast between proposed features and existing features that represent the area's valued aesthetic image;
- The degree to which a proposed zone change would result in buildings that would detract from the existing style or image of the area due to density, height, bulk, setbacks, signage, or other physical elements;
- The degree to which the project would contribute to the area's aesthetic value;
- Applicable guidelines and regulations;

Based on these factors, the Project would have potentially significant impacts if it were to substantially alter, degrade, or eliminate the existing visual character of an area, including valued existing features or resources; or if the Project were to introduce elements that substantially detract from the visual character of an area.

(2) Views

- The nature and quality of recognized or valued views (such as natural topography, settings, manmade or natural features of visual interest, and resources such as mountains or the ocean);
- Whether the project affects views from a designated scenic highway, corridor or parkway;
- The extent of obstruction (e.g., total blockage, partial interruption, or minor diminishment);
- The extent to which the project affects recognized views available from a length of a public roadway, bike path, or trail, as opposed to a single-fixed vantage point;

Based on these factors, the Project would have potentially significant impacts with respect to views if its development were to obstruct or alter an existing recognized or valued view.

(3) Light/Glare

- The change in ambient illumination levels as a result of project sources; and
- The extent to which project lighting would spill off the project site and effect adjacent light-sensitive areas.

Based on these criteria, the proposed Project would have a significant impact on light aesthetics if proposed Project lighting would substantially alter the character of off-site areas surrounding the Project Site.

c. Project Impacts

In connection with the proposed Project approximately 147 acres would be graded within the southern, eastern and westernmost areas of the Project Site, as shown in Figure II-9, *Grading and Roadway Calculation Plan* in Section II, Project Description, of this Draft EIR. A majority of this area is currently covered with low vegetation. Of the affected acreage, approximately 94 acres would be developable and improved with interment areas. Overall, the Project includes approximately 22,500 square feet of new floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non–occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. In addition, approximately 16 acres would be improved with roadways and non-interment buildings. The remaining approximately 36 acres of graded areas would be improved as undevelopable slope and drainage/basin areas.

To illustrate the proposed Project's design features, several concept design simulations have been prepared. Conceptual design simulations of the proposed Project, as seen from several vantages to the north of the Project Site, both public and private, are provided in Figures IV.A-21 through IV.A-25 on pages IV.A-35 through IV.A-39. Conceptual Design Views A-1 (Figure IV.A-21 on page IV.A-35) and A-2 (Figure IV.A-22 on page IV.A-36) are located at the southern terminus of Bob Hope Drive and at the southern boundary of Buena Vista Park, respectively, and include views toward the proposed West Area Mausoleum. Conceptual Design View B (Figure IV.A-23 on page IV.A-37) is located at the corner of South Reese Place and West Valleyheart Drive, and includes views toward the proposed developments within the Central and East Areas of the Project Site. Conceptual Design Views C (Figure IV.A-24 on page IV.A-38) and D (Figure IV.A-25 on page IV.A-39) are located within the Mount Sinai Memorial Park, adjacent to the southern boundary of the park along Mount Sinai Drive. Conceptual Design View C includes private views from Mount Sinai Memorial Park toward the proposed Central Area Mausoleums and Conceptual Design View D includes views toward the proposed East Area Chapel and Tower.

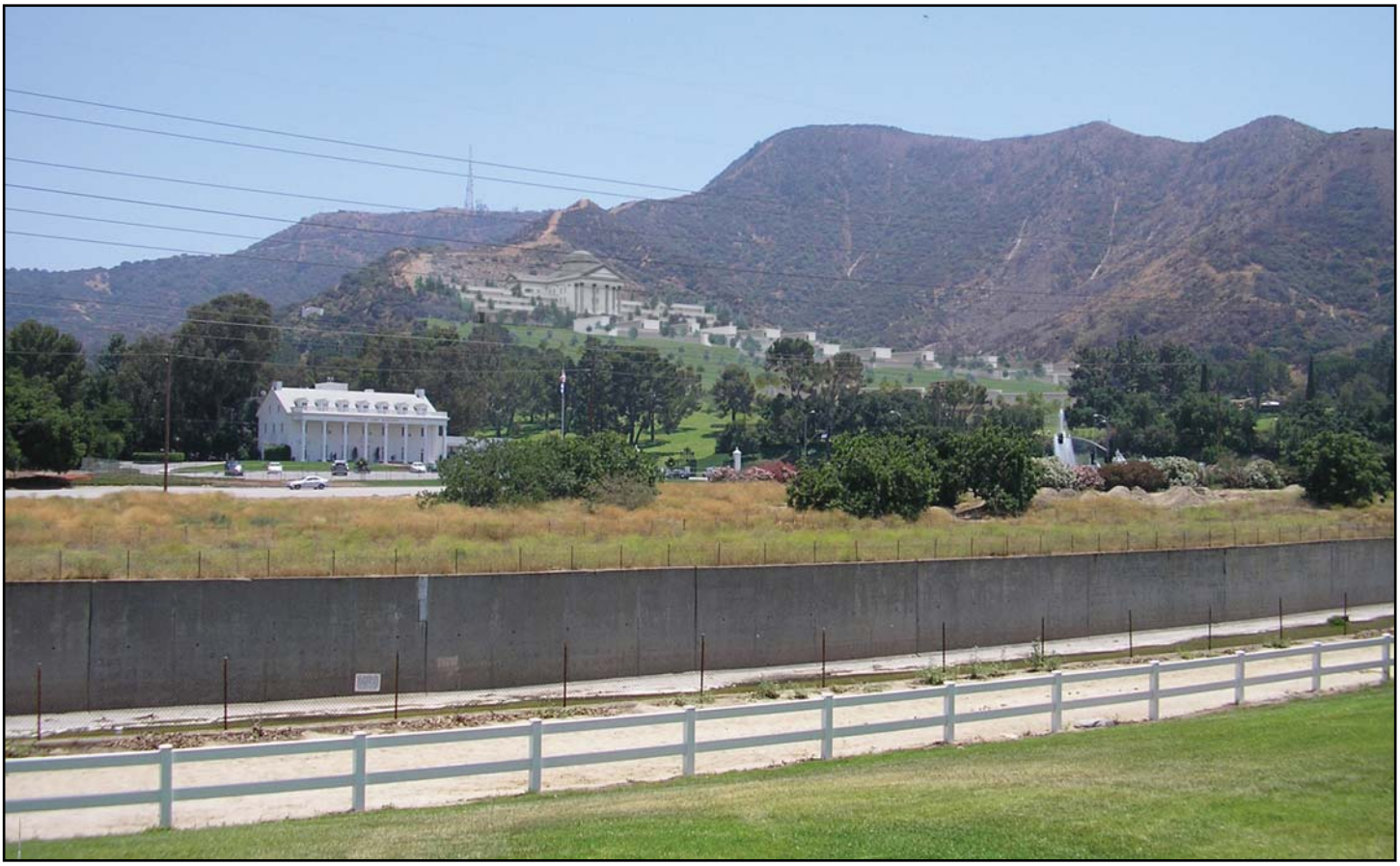


View A1: View of West area from southern terminus of Bob Hope Drive.



Conceptual Views Key Map

Source: Forest Lawn Memorial Park Association, December 2008.



View A2: View of West area from southern boundary of Buena Vista Park.



Conceptual Views Key Map

Source: Forest Lawn Memorial Park Association, December 2008.



View B: View of Central and east areas from corner of S. Reese Place and W. Valleyheart Drive.



Conceptual Views Key Map

Source: Forest Lawn Memorial Park Association, December 2008.

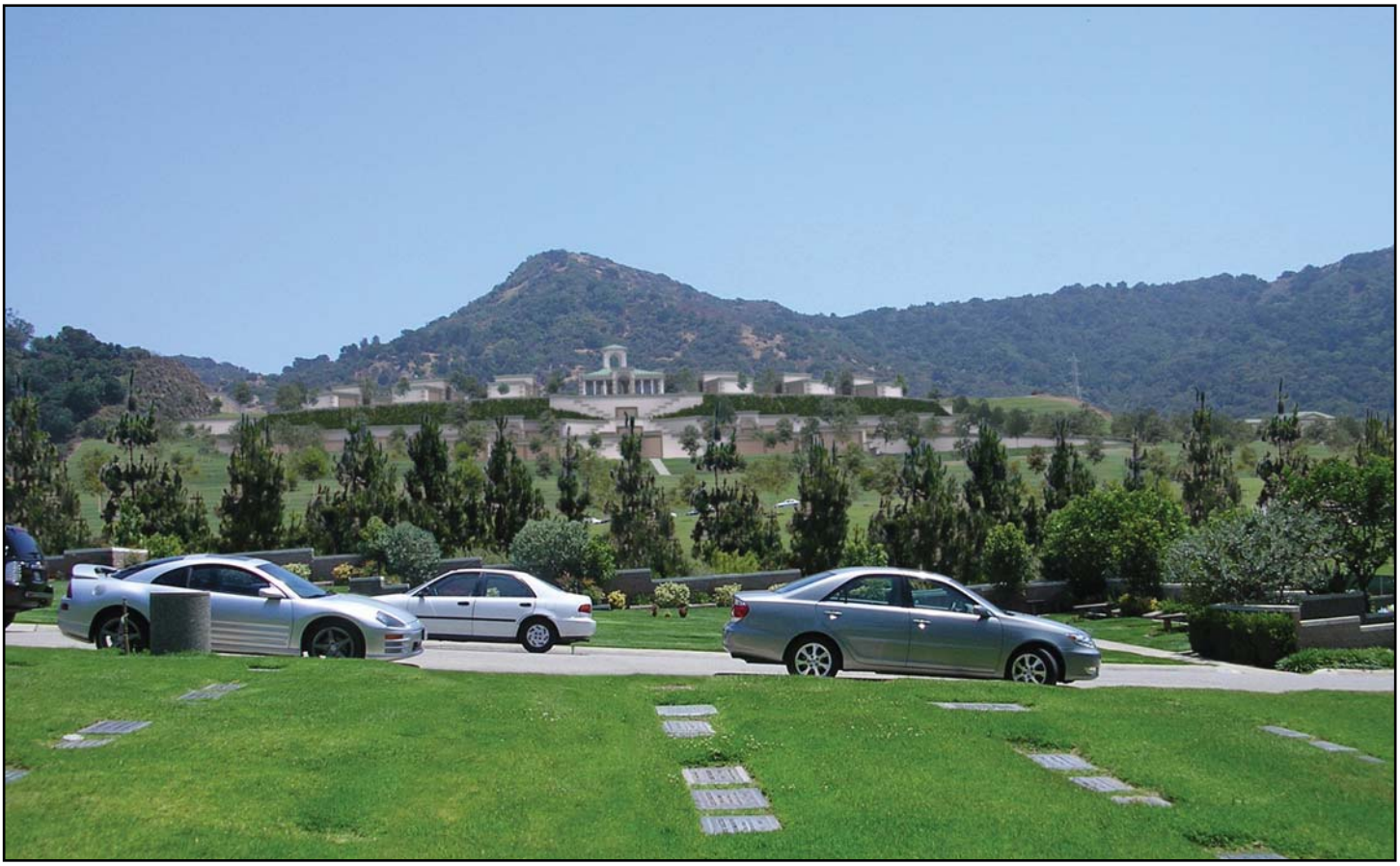


View C: View of Central Area from Mount Sinai Memorial Park, along Mount Sinai Drive.



Conceptual Views Key Map

Source: Forest Lawn Memorial Park Association, December 2008.



View D: View of East Area from Mount Sinai Memorial Park, along Mount Sinai Drive.



Conceptual Views Key Map

Source: Forest Lawn Memorial Park Association, December 2008.

(1) Visual Character and Viewsheds

The existing visual character of the Project Site is defined by both its location within the backdrop of the Santa Monica Mountains, and the built environment of the Forest Lawn Memorial-Park - Hollywood Hills property, which is defined by cemetery-related landscaped open space areas, structures and buildings. Public views of the Project Site are available from the south, and east of the Project Site. In addition, limited intermittent public views of the Project Site are available from north of the Project Site, including Buena Vista Park, Forest Lawn Drive, Buena Vista Street as it approaches the Project Site, a segment of West Alameda Avenue, and the I-5 Freeway. From the south and east, large portions of the Project Site are visible from several vantage points within Griffith Park, including Mount Hollywood Drive, the Toyon Trail, Mount Lee, and Mount Chapel.

(a) Northern Public Vantage Points

Although the proposed grading and construction would disturb some of the existing natural terrain within the Project Site, the proposed Project would incorporate several techniques and measures such that the proposed development would continue to complement the surrounding natural environment. Specifically, the proposed grading is proposed to be divided into three grading areas and three phases, such that not all areas proposed for grading would be disturbed at the same time. This proposed phasing would serve to minimize the potential visual impact upon surrounding areas. Additionally, all grading would occur in accordance with the City of Los Angeles requirements, which would require gradients of 2:1 (horizontal to vertical) or flatter. By grading to this specification, all grading that occurs at the southern boundary of the Project Site would visually blend with existing topography. Further, it is important to note that a portion of the Project's grading would take place on areas that are already in various stages of grading. As a result, the existing grading has resulted in unvegetated soils that are terraced and contain visible sediment erosion controls.

Construction of new cemetery related structures, buildings, and landscaped areas, (discussed in detail in Section II, Project Description) would occur over an approximately 40-year time period (2011 to 2050), minimizing visual impacts associated with the alteration of existing natural open space areas. Further, in general, many of the existing and proposed ground elevations are obstructed from vantage points from the north by the area's topography and existing vegetation. No ridgelines would be removed or modified as part of the proposed Project's grading; new construction would be built into the hillside areas below ridgelines.

New construction would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within the Forest Lawn Memorial-Park – Hollywood Hills property. Further, the architectural scale and

massing of the proposed structures would be compatible with the existing structures and development on the Project Site. One of the Project's non-habitable structures, the proposed bell tower, would rise to a height of up to 90 feet, which is taller than existing and proposed on-site structures. While this feature would be taller than other proposed features, it would require a relatively small footprint and would generally be on the same scale and mass as other existing and proposed structures. Further, the Bell Tower would not be tall enough to obstruct views of the Santa Monica Mountains from public or private vantage points to the north of the Project Site. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. Given the historical context of the Forest Lawn Memorial-Park - Hollywood Hills property, as well as the topography and the employment of the abovementioned design standards, the proposed structures would remain visually compatible with those uses. These factors, in conjunction with the above simulations demonstrate that no significant modification to existing public views or landforms would result from construction of the structures associated with the proposed Project.

As shown in Conceptual Design View A-1 (Figure IV.A-21 on page IV.A-35), from the terminus of Bob Hope Drive and at the southern boundary of Buena Vista Park, views of the proposed mausoleum in the West Area are partially interrupted by existing and proposed trees on the Project Site as well as those adjacent to Forest Lawn Drive. A large electrical transmission line tower and the Los Angeles River Flood Control Channel are prominent in the foreground. Views of the Project Site and proposed structures are limited primarily by the existing mature vegetation. Conceptual Design View A-2 (Figure IV.A-22 on page IV.A-36), located at the southern terminus of Bob Hope Drive and at the southern boundary of Buena Vista Park, also provides relatively distant views of the proposed structures within the West Area of the Project Site. Views of the Los Angeles River Flood Control Channel and the existing Administration/Mortuary/Flower Shop building are also prominent at this location, as well as mature trees on and adjacent to the Project Site. Views of proposed structures are limited primarily by distance and existing vegetation at this location.

As shown on Conceptual Design View B (Figure IV.A-23 on page IV.A-37), from the corner of South Reese Place and West Valleyheart Drive, distant views are provided of the proposed structures within the Central and West Areas of the Project Site. As shown therein, views of the Project Site and proposed structures from this location are limited primarily by distance, topography, and extensive existing vegetation, but also by the SR-134 Freeway in the foreground.

As discussed above, Forest Lawn Drive is a City-designated scenic parkway. A bikeway also parallels portions of this scenic highway. Most areas proposed to be graded and developed are not visible from Forest Lawn Drive, and those portions that would be visible incorporate cemetery related uses and structures that would be consistent with those present in the existing built environment, providing enhanced view opportunities within the public viewshed. The proposed Project includes development of cemetery-related structures which could reach up to 100 feet in height, and potentially be visible from Forest Lawn Drive. However, because of the limited viewshed that is currently available from Forest Lawn Drive in the vicinity of the Project Site, topographical changes associated with grading and development of the west, south and east development areas would be out of view and not readily apparent to the passing motorist. Proposed structures would expand existing cemetery uses within the Project Site, adding to the existing aesthetic values of the Forest Lawn Memorial-Park - Hollywood Hills property through the use of consistent structural design, and landscape. As such, visual impacts upon a designated scenic parkway would be less than significant.

In summary, intermittent public vantages are available north of the Project Site (i.e., Buena Vista Park, Forest Lawn Drive, Buena Vista Street as it approaches the Project Site, a segment of West Alameda Avenue, the I-5 Freeway). The proposed Project would provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. In addition, approximately 75 acres of previously disturbed areas of the Project Site would be included within the Project's proposed grading. Thus, the proposed development would improve the existing visual character of some portions of the property by replacing several areas that are in intermittent states of grading and contain very little vegetation with extensive landscaping, cemetery related features, structures and site improvements that would be uniform and consistent with the historical and existing land uses on the Forest Lawn Memorial-Park – Hollywood Hills property. Thus, impacts to visual character and viewsheds from vantage points north of the Project Site would be less than significant.

(b) Southern Public Vantage Points

As discussed above, large portions of the Project Site are visible from public vantage points in Griffith Park south and southeast of the Project Site due to their elevated position above the Project Site. As a result, Project improvements, including construction activities, would be visible from these locations.

While the Project Site's ground elevation and the base of the Santa Monica Mountains are largely obstructed from the north, these features are visible from public vantage points within Griffith Park. However, as mentioned above, grading would take place in three general phases and would include areas that are already partially graded.

As part of the proposed Project, all grading would occur in accordance with the City of Los Angeles requirements, which would require gradients of 2:1 (horizontal to vertical) or flatter. By grading to this specification, all grading that occurs at the southern end of the Project Site would blend in visually with existing topographical features. As a result, the proposed Project's final grading and development of these areas would result in more visually uniform contouring throughout the Project Site and would also improve the consistency of the visual character of the Project Site by introducing a final grading design that visually transitions the Project Site with the natural topography of the Project area.

Regarding views of the Project's proposed structures, as discussed above, new construction would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within the Forest Lawn Memorial-Park – Hollywood Hills property. Further, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site. One of the Project's structures, the proposed bell tower, would rise to a height of 100 feet, which is taller than existing and proposed on-site structures. However, from the higher elevation at which the Griffith Park vantage points are located, the difference in height would not be prominent from these vantage points. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. Given the historical context of the Forest Lawn Memorial-Park - Hollywood Hills property, as well as the topography and the employment of the above mentioned design standards, the proposed structures would remain visually compatible with those uses. The proposed Project would provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. As such, impacts to visual character and viewsheds from vantage points south of the Project Site would be less than significant.

(c) Private Vantage Points

Existing private views from Mount Sinai Memorial Park would be modified by the grading and subsequent construction of proposed improvements within the eastern portion of the Project Site, including garden developments, mausoleums, wall crypts/columbaria, and roadways. As noted above, Conceptual Design Views C (Figure IV.A-24 on page IV.A-38) and D (Figure IV.A-25 on page IV.A-39), located adjacent to the southern boundary of the park along Mount Sinai Drive, include views toward the proposed Central Area mausoleums and East Area chapel and bell tower, respectively. While the proposed Project would alter existing private views by replacing existing undeveloped areas with cemetery related uses and landscaping, the proposed development would be consistent

with existing cemetery development, adding cemetery related structures and features within the existing Forest Lawn Memorial-Park property. Further, portions of the undeveloped area of the Project Site are already in varying stages of grading. Therefore, impacts to private views would be less than significant.

(2) Light and Glare

Light and glare would slightly increase as a result of the proposed Project; however the existing uses that emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. The proposed Project would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Furthermore, as there are no residential properties or other light sensitive uses immediately surrounding the Project Site, the lighting plan would not create any adverse light or glare impacts on neighboring properties. Therefore, light and glare impacts would be less than significant. Lighting impacts upon wildlife are addressed in Section IV.C, Biological Resources, of this Draft EIR.

4. Cumulative Impacts

Cumulative aesthetic impacts could occur if other related projects in the vicinity of the Project Site would result in the degradation of the Project area's visual character or the introduction of substantial light or glare or shade and shadow in conjunction with the impacts of the proposed Project. Due to the topography of the Project Site, the open space nature of land uses in the adjacent hillside areas, and the relatively isolated views created by the open space hillsides to the south, no related projects have been identified within the proximate viewshed of the Project Site. As such, the proposed Project would not result in adverse light, glare, visual character, or viewshed impacts, that when combined with effects from other projects would be cumulatively considerable.

5. Mitigation Measures

Although impacts related to aesthetics are anticipated to be less than significant, the following mitigation measures are recommended to further reduce the proposed Project's less than significant impacts:

Mitigation Measure A-1: Prior to issuance of a building permit, the applicant shall prepare a Lighting Plan in coordination with and subject to the approval of the Department of City Planning to establish lighting standards and guidelines.

Mitigation Measure A-2: The exterior of the proposed building(s) shall be constructed of materials such as high-performance tinted non-reflective glass and/or pre-cast concrete, honed natural stone, or fabricated wall surfaces.

Mitigation Measure A-3: Natural features, such as prominent knolls or ridge lines, shall be preserved.

6. Level of Significance After Mitigation

The proposed Project's impacts to aesthetics, including visual character and viewsheds, light and glare, and shade and shadow would be less than significant.

IV. Environmental Impact Analysis

B.1 Air Quality

1. Introduction

This section examines the degree to which the Project may result in significant adverse changes to air quality and climate change. Both short-term construction emissions occurring from activities such as site grading and haul truck trips, as well as long-term effects related to the ongoing operation of the Project are evaluated. This analysis generally focuses on air pollution from two perspectives: daily emissions and pollutant concentrations. "Emissions" refer to the actual quantity of pollutant measured in pounds per day (ppd). "Concentrations" refer to the amount of pollutant material per volumetric unit of air and are measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$). Calculation worksheets, analysis assumptions, and model outputs used in this evaluation are presented in Appendix B of this EIR.

2. Environmental Setting

a. Air Quality Background

The Project lies on the north side of the Hollywood Hills in the City of Los Angeles which is located within the South Coast Air Basin (Basin). This Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate is semi-arid and characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples include boilers or combustion equipment that produces electricity or generates heat. Area sources are widely distributed and produce many small emissions. Examples include residential and commercial water heaters,

painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbeque lighter fluid and hair spray. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the federal and State governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria that have been adopted for them. The national and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The criteria air pollutants which are most relevant to current air quality planning and regulation in the Basin include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead. In addition, toxic air contaminants (TACs) and greenhouse gas (GHG) emissions are of a concern in the Basin.

(1) Ozone

Ozone is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable.

Individuals exercising outdoors, children and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as

mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

(2) Carbon Monoxide

Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are the primary source of CO in the Basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport. Conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

(3) Particulate Matter

Respirable Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$) consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

A correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Exposure to fine particulate matter can be related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease and children appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

(4) Nitrogen dioxide

Nitrogen dioxide (NO_2) is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO2 commonly called NOx. NO_2 absorbs blue light and the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy individuals. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

(5) Sulfur dioxide

Sulfur dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. A short exposure to low levels of SO_2 can result in airway constriction in some asthmatics. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

(6) Lead

Lead occurs in the atmosphere as particulate matter. The combustion of leaded gasoline used to be the primary source of airborne lead in the Basin, although the use of leaded gasoline is no longer permitted for on-road motor vehicles. Today the primary

sources of airborne lead pollution include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence levels. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to the breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

(7) Toxic Air Contaminants

Toxic air contaminants (TACs) refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. TACs are known to cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects.

TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than “criteria” pollutants in that ambient air quality standards have not been established for them, largely because there are hundreds of air toxics and their effects on health tend to be felt on a local scale rather than on a regional basis.

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health

effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by CARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The United States Environmental Protection Agency (U.S. EPA) has adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially.

b. Regulatory Setting

Air quality within the Basin is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the Basin are discussed below.

(1) Federal

(a) United States Environmental Protection Agency

The United States Environmental Protection Agency (U.S. EPA) is responsible for setting and enforcing the national ambient air quality standards for atmospheric pollutants. As part of its enforcement responsibilities, U.S. EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the State Implementation Plan.

(2) State

(a) California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets California Ambient Air Quality Standards, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Off-road diesel vehicles, which include construction equipment, are also regulated by CARB for both in-use (existing) and new engines. There have been four sets of standards implemented by CARB for new off-road diesel engines, known as Tiers. Tier 1 standards began in 1996. Tier 2 and 3 were adopted in 2000 and were more stringent than the first tier. Tier 2 and 3 standards were completely phased in by 2006 and 2008, respectively. On December 9, 2004, CARB adopted the Tier 4 or fourth phase of emission standards for late model year diesel engines.[1] These emission standards are nearly identical to those finalized by U.S. EPA in May 2004.

Since off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of an older fleet that do not have emission controls. As such, CARB approved, on July 26, 2007, a regulation to reduce emission from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation includes an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. The regulation also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets.

(3) Regional

(a) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the South Coast Air Quality Management District. SCAG's RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while

[1] *For new 2014 off-road diesel engines between 174 hp and 750 hp, Tier 4 Requirements limit emissions to 0.015 grams/hp-hr for PM, 0.14 grams/hp-hr for VOC, 0.30 grams/hp-hr for NOx, and 2.6 grams/hp-hr for CO. An interim Tier 4 standard has also been established for new 2011-2013 off-road diesel engines of less than 174 hp (2.5 grams/hp-hr for NOx) and for engines between 174 hp and 750 hp (1.5 grams/hp-hr for NOx).*

maintaining consistency with regional goals regarding growth and changes through the year 2015, and beyond. Policies within SCAG's RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

(b) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the Basin. SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary.

SCAQMD is directly responsible for reducing emissions to meet federal and State ambient air quality standards, including preparation of Air Quality Management Plans (AQMPs). The 2007 AQMP was prepared to comply with the federal and California Clean Air Acts, to accommodate growth, to reduce the high levels of pollutants in the Basin, to meet federal and State air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. The 2007 AQMP identifies the control measures that will be implemented over a 20-year horizon to reduce major sources of pollutants. Implementation of control measures established in the previous AQMPs has substantially decreased the population's exposure to unhealthful levels of pollutants, even while substantial population growth has occurred within the Basin.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the Project. Instead, SCAQMD published the California Environmental Quality Act (CEQA) *Air Quality Handbook* in November 1993 to assist lead agencies in evaluating potential air quality impacts of projects proposed in the Basin.[2] SCAQMD's CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis.

SCAQMD adopts rules and regulations to implement portions of the Air Quality Management Plan. Several of these rules may apply to construction or operation of the Project. For example, SCAQMD Rule 403 requires the implementation of best available fugitive dust control measures during active construction periods capable of generating

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[2] *See SCAQMD website: http://www.aqmd.gov/CEQA/hdbk.html.*

fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

SCAQMD has developed the mass emission Localized Significance Thresholds (LSTs) to assist with the analysis of local ambient air quality impacts. The mass emission LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of SCAQMD CEQA significance thresholds for CO, NO_2, PM_{10} and $PM_{2.5}$ based on ambient concentrations of those pollutants at the nearest sensitive receptors.

(4) Local

(a) City of Los Angeles

The Air Quality Element of the City of Los Angeles General Plan was adopted on November 24, 1992 and sets forth the following goals, objectives and policies which guide the City in the implementation of its air quality improvement strategies:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation and air quality;
- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and
- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

In accordance with CEQA and the CEQA review process, the City assesses the air quality impacts of new development projects. The City utilizes SCAQMD's CEQA Air Quality Handbook as the guidance document for the environmental review.

c. Existing Regional Air Quality

Ambient air quality is determined primarily by the type and amount of pollutants emitted into the atmosphere, as well as the size, topography, and meteorological conditions of a geographic area. The Basin has low mixing heights and light winds, which help to accumulate air pollutants. Measurements of ambient concentrations of the criteria pollutants are used by U.S. EPA and CARB to assess and classify the air quality of each regional air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and State standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment" for that pollutant. If the pollutant concentration meets or exceeds the standard (depending on the specific standard for the individual pollutants), the area is classified as a "nonattainment" area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified." U.S. EPA and CARB use different standards for determining whether the Basin is in attainment. Federal and State standards are summarized in Table IV.B-1 on page IV.B-11. The attainment status for the Basin with regard to the National Ambient Air Quality Standards and California Ambient Air Quality Standards is shown in Table IV.B-2 on page IV.B-12.

d. Existing Local Air Quality

SCAQMD monitors ambient air pollutant concentrations through a series of monitoring stations located throughout the Basin. In doing so, SCAQMD has divided the region into 27 source receptor areas (SRAs) in which 31 monitoring stations operate. The Project Site is located within SRA 7, which covers the East San Fernando Valley area. Table IV.B-3 on page IV.B-13 identifies the ambient pollutant concentrations that have been measured in SRA 7 through the period of 2006 to 2008.

Existing land uses surrounding the Project Site include cemetery uses, the Los Angeles River Flood Control Chanel, the 134 Freeway, residences and commercial uses. Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, and mobile sources, primarily automobile traffic. Motor vehicles are the primary source of pollutants in the local vicinity.

e. Sensitive Receptors

Land uses such as schools, hospitals, and convalescent homes are considered sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than

Table IV.B-1
Ambient Air Quality Standards

Air Pollutant	Averaging Time	State Standard	Federal Standard
Ozone	1-hour	0.09 ppm	--
	8-hour	0.07 ppm	0.075 ppm
Carbon Monoxide	1-hour	20.0 ppm	35.0 ppm
	8-hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide	1-hour	0.18 ppm	--
	Annual	0.030 ppm	0.053 ppm
Sulfur Dioxide	1 Hour	0.25 ppm	--
	24 Hour	0.04 ppm	0.14 ppm
PM_{10}	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$
	Annual	20 $\mu g/m^3$	--
$PM_{2.5}$	24 Hour	--	35 $\mu g/m^3$
	Annual	12 $\mu g/m^3$	15 $\mu g/m^3$

Note: The lead standard is not listed because of the phase-out of leaded gasoline. Atmospheric lead remains a toxic air contaminant, but unless there is reason to suspect lead in the source emissions there is no reason to analyze for it

Source: California Air Resources Board, Ambient Air Quality Standards, website: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, August 2008.

the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise occasionally associated with recreation places a high demand on the human respiratory function. The location of the nearest off-site sensitive receptor to the Project is directly to the east at Griffith Park. Residential neighborhoods are located across Forest Lawn Drive and the Los Angeles River Flood Control Channel to the north and northwest of the Project Site approximately 1,200 feet and 375 feet, respectively.

3. Environmental Impacts

a. Thresholds of Significance

For air quality, the City primarily relies on significance thresholds recommended by SCAQMD in its CEQA Air Quality Handbook. The SCAQMD-recommended significance thresholds are summarized below for construction emissions, operational emissions, toxic

Table IV.B-2
Attainment Status for the South Coast Air Basin (Los Angeles County Portion)

Pollutant	Ambient Status	
	National Ambient Air Quality Standards	California Ambient Air Quality Standards
Ozone	Non-attainment	Non-attainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
PM_{10}	Non-attainment	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment

Source: California Air Resources Board: State Area Designation Maps found at http: www.arb.ca.gov/desig/adm, May 2008.

air contaminants, and plan consistency. The City has established additional thresholds for operational emissions, which are also provided.

(1) Construction Emissions

(a) Construction Emissions – SCAQMD Mass Daily Emissions Thresholds

Construction-related mass daily emissions that exceed any of the following emissions thresholds are considered a significant impact:

- 75 pounds per day of VOC;
- 100 pounds per day of NOx;
- 550 pounds per day of CO;
- 150 pounds per day of SOx;
- 150 pounds per day of PM_{10}; and
- 55 pounds per day of $PM_{2.5}$.

Construction-related emissions that exceed these thresholds are also considered cumulatively considerable for any individual project based on SCAQMD methodology. These thresholds apply to individual development projects only, not the combined emissions generated by a set of cumulative development projects.

Table IV.B-3
Summary of Ambient Air Quality in the Project Vicinity

Emissions Source	Year		
	2006	2007	2008
Ozone			
Maximum 1-hour concentration measured	0.17 ppm	0.116 ppm	0.133 ppm
Days exceeding national 0.12 ppm 1-hour standard	6	0	1
Days exceeding State 0.09 ppm 1-hour standard	25	13	20
Maximum 8-hour concentration	0.128 ppm	0.096 ppm	0.109 ppm
Days exceeding national 0.08 ppm 8-hour standard	12	6	8
Days exceeding State 0.07 ppm 8-hour standard	23	19	35
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour concentration measured	71.0 µg/m^3	109.0 µg/m^3	66.0 µg/m^3
Days exceeding national 150 µg/m^3 24-hour standard	0	0	0
Days exceeding State 50 µg/m^3 24-hour standard	10	3	7
Fine Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour concentration measured	50.7 µg/m^3	56.5 µg/m^3	57.5 µg/m^3
Days exceeding national 35 µg/m^3 24-hour standard1	6	9	2
Carbon Monoxide (CO)			
Maximum 1-hour concentration measured	4.0 ppm	4.0 ppm	3.0 ppm
Days exceeding national 35.0 ppm 1-hour standard	0	0	0
Days exceeding State 20.0 ppm 1-hour standard	0	0	0
Maximum 8-hour concentration measured	3.5 ppm	2.8ppm	2.6ppm
Days exceeding national & State 9.0 ppm 8-hour standard	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration measured	0.10 ppm	0.09 ppm	0.11 ppm
Days exceeding State 0.18 ppm 1-hour standard	--	--	--
Annual arithmetic mean	0.0274 ppm	0.0289 ppm	0.0285 ppm
Does measured annual arithmetic mean exceed State 0.03 ppm annual arithmetic mean standard?	No	No	No
Maximum 1-hour concentration measured	0.10 ppm	0.09 ppm	0.11 ppm

Note: ppm = parts per million by volume; µg/m^3 = micrograms per cubic meter

Source: South Coast Air Quality Management District (http://www.aqmd.gov/smog/historicaldata.htm), accessed March 23, 2010.

(b) Construction Emissions – SCAQMD Local Significance Thresholds

Construction-related emissions that generate the following localized pollutant concentrations at existing sensitive receptors are considered significant:

- 10.4 micrograms per cubic meter ($\mu g/m^3$) of PM_{10} averaged over a 24-hour period;
- 1.0 micrograms per cubic meter of PM_{10} averaged over an annual period; or
- 10.4 micrograms per cubic meter of $PM_{2.5}$ averaged over a 24-hour period.

Construction-related emissions that cause the following ambient air quality standards to be exceeded at existing sensitive receptors are considered significant:

- 0.18 parts per million NO_2 averaged over a 1-hour period (State standard);
- 0.03 parts per million NO_2 averaged over an annual period (State standard);
- 20 parts per million of CO averaged over a 1-hour period (State standard); and
- 9.0 parts per million of CO averaged over an 8-hour period (national and State standard).

(2) Operational Emissions

The *City of Los Angeles CEQA Thresholds Guide* states that a project would normally have a significant impact on air quality from project operations if any of the following would occur:

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the daily thresholds for operations recommended by the SCAQMD.
- Either of the following conditions would occur at an intersection or roadway or roadway within one-quarter mile of a sensitive receptor:
  - The project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9 parts per million (ppm), respectively; or
  - The incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.
- The project creates an objectionable odor at the nearest sensitive receptor.

(a) Operational Emissions – SCAQMD Mass Daily Emissions Thresholds

Operational mass daily emissions that exceed any of the following emissions thresholds are considered significant:

- 55 pounds per day of VOC;
- 55 pounds per day of NOx;
- 550 pounds per day of CO;
- 150 pounds per day of SOx;
- 150 pounds per day of PM_{10}; and
- 55 pounds per day of $PM_{2.5}$.

The SCAQMD also recommends that any operational emissions from individual projects that exceed these thresholds be considered cumulatively considerable. These thresholds apply to individual development projects only, not the combined emissions generated by a set of cumulative development projects.

(b) Operational Emissions – SCAQMD Local Significance Thresholds

Operational emissions that generate the following localized pollutant concentrations at existing sensitive receptors are considered significant:

- 2.5 micrograms per cubic meter ($\mu g/m^3$) of PM_{10} averaged over a 24-hour period; or
- 2.5 micrograms per cubic meter of $PM_{2.5}$ averaged over a 24-hour period.

Operational emissions that cause the following ambient air quality standards to be exceeded at existing sensitive receptors are considered significant:

- 0.18 parts per million NO_2 averaged over a 1-hour period (State standard);
- 20 parts per million of CO averaged over a 1-hour period (State standard); or
- 9.0 parts per million of CO averaged over an 8-hour period (national and State standard).

The SCAQMD recommends using the CALINE4 model to predict local CO concentrations from project-related traffic emissions at sensitive receptors near congested roadways and intersections. However, additional traffic is not expected to be generated by the proposed Project. Because the Project will not cause any increase in local CO concentrations from Project-related traffic, such an evaluation was not conducted.

(3) SCAQMD Toxic Air Contaminants Thresholds

Projects that can emit Toxic Air Contaminants (TACs) that exceed the maximum individual cancer risk of 10 in one million or a non cancer hazard index greater than 1.0 are considered significant and cumulatively considerable.

(4) Consistency with the Applicable AQMP

For general development projects, SCAQMD recommends that consistency with the current Air Quality Management Plan (AQMP) be determined by comparing the population generated by the project to the population projections used in the development of the AQMP. Exceeding the AQMP population projections could jeopardize attainment of the air quality conditions projected in the AQMP and is considered to be a significant impact. The Project will not involve any increase in population.

b. Air Quality Analysis Methodology

(1) Construction Criteria Pollutant Emissions

(a) Mass Daily Emissions

The mass daily emissions from off-road construction equipment are calculated using emission factors developed by CARB using the OFFROAD model. The emissions factors for on-road heavy duty trucks were developed by CARB using the EMFAC07 model. Construction activities would generate criteria air pollutants from vehicle emissions and mobilized dust. Construction equipment could include excavators, dozers, loaders, and water trucks. See Appendix B for a complete list of the construction equipment anticipated for use during Project construction. Some of this equipment would be used during grading activities as well as truck travel within the Project Site. Emissions during construction activities also include export truck trips off-site to remove soil during the grading phase. For a conservative analysis, all of the construction equipment used in this analysis is assumed to be diesel-powered. Appendix B provides the detailed emissions analysis.

(b) Local Significance Thresholds

Construction emissions were also analyzed to determine whether they would cause significant adverse localized air quality impacts at nearby sensitive receptors located off-

site.[3] In accordance with SCAQMD methodology for determining ambient (local) air quality impacts, anticipated ambient air concentrations from projects larger than five acres in size are determined using a computer-based air quality dispersion model.[4] The results are then compared to the calculated Localized Significance Thresholds (LSTs) for PM_{10}, $PM_{2.5}$, NO_2, and CO. LSTs for PM_{10} and $PM_{2.5}$ are based upon 24-hour average concentrations of 10.4 micrograms per cubic meter ($\mu g/m^3$), based upon compliance with SCAQMD Rule 403 (Fugitive Dust).[5] LSTs for NO_2 and CO are compared to the California Ambient Air Quality Standards after including background concentrations.

The Industrial Source Classification (ISC) model is used to estimate ambient air concentrations from the Project. This model predicts what the off-site concentrations of pollutants will be from the Project's on-site daily emissions. This model is approved for use by U.S. EPA, CARB, and SCAQMD. A standard unit emission rate of 1 gram/second for each source was used in the ISC model. The air dispersion modeling results are therefore expressed in terms of χ/Q (chi over Q) for each receptor point, which is the modeled downwind air concentration based on the emission rate of 1 g/s for all the sources and is expressed in units of $(\mu g/m^3)/(g/s)$. To calculate the air concentrations, the chi over Q was multiplied by the emission rate. Dispersion model averaging times are specified based on the averaging times of ambient standards and air significance thresholds. Averaging times include 1-hour and annual for NO_2, 1-hour and 8-hour for CO, and 24-hour and annual for PM_{10}, and 24-hour for $PM_{2.5}$. Criteria pollutant emissions for the ambient concentration analysis were calculated based on the same methodology used to evaluate the mass emissions but are limited to on-site emissions. Emissions were converted to a gram per second emission rate basis for input into the air dispersion model assuming 8 hours per day of construction.

The ISC model offers several options for representing construction emission sources. Given uncertainty in the exact location of all activities within the Project Site, a conservative modeling approach was used to represent construction. Polygon area sources and volume sources covering the planned construction areas were used to represent fugitive dust emissions and combustion sources, respectively. Volume sources (for combustion emissions) and area sources (for fugitive emissions that are not related to

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[3] *SCAQMD. Final localized Significance Threshold Methodology, July 2008.*

[4] *Ibid.*

[5] *U.S. EPA. AirData: Access to Air Pollution Data, September 26, 2006. Available on-line at: http://www.epa.gov/air/data/index.html, date accessed May 21, 2008.*

combustion emissions, such as dust emissions related to grading activities or truck traffic on unpaved roads) were used to model construction activities.

This analysis incorporates conservative assumptions that likely overstate actual impacts. For short-term averaging times (e.g., 1-hour, 8-hour, 24-hour), the analysis uses peak emission rates and evaluates them over all meteorological conditions in SCAQMD meteorological data set to determine the maximum air quality impact for any hour, which is the value reported here. Because this analysis assumes that both peak emissions and worst-hour meteorological conditions occur exactly at the same time (both rare events), there is a low probability that the estimated maximum concentrations will actually occur.

(2) Operational Emissions

(a) Mass Daily and Localized Significance Thresholds

Operational emissions associated with the Project are estimated using the URBEMIS 2007 computer model. Operational emissions potentially could be comprised of mobile source emissions and area source emissions. As noted above, however, the Project is not expected to cause an increase in motor trips. Area source emissions are generated by, among other things, natural gas consumption for space and water heating, landscape maintenance equipment, consumer products, and architectural coatings. To determine if an air quality impact would occur, the net increase in operational emissions generated by the Project over the operational emissions generated by the existing land uses at the Project Site are compared with SCAQMD's significance thresholds.

Operational ambient (local) air concentrations were estimated using a computer-based air quality dispersion models. The results were then compared to LSTs for PM_{10}, $PM_{2.5}$, NO_2, and CO[6]. LSTs for PM_{10} and $PM_{2.5}$ were based upon 24-hour average concentrations of 2.5 micrograms per cubic meter ($\mu g/m^3$), based upon compliance with Rule 403 (Fugitive Dust).[7] LSTs for NOx and CO were compared to the California Ambient Air Quality Standards after including background concentrations. Emissions were converted to a gram per second emission rate basis for input into the air dispersion model assuming 8 hours per day of operation. As with the localized construction emissions

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[6] *South Coast Air Quality Management District. Final localized Significance Threshold Methodology, July 2008.*

[7] *U.S. EPA. AirData: Access to Air Pollution Data, September 26, 2006. Available on-line at: http://www.epa.gov/air/data/index.html, date Accessed May 21, 2008.*

evaluation, air dispersion modeling was conducted to predict concentrations of pollutants from on-site daily emissions associated with on-site sources.

(3) Hazardous Pollutant Emissions

Toxic air contaminants (TACs) emissions from the Project are analyzed according to SCAQMD's methodology. The primary TAC of concern for this project is diesel particulate matter.

The SCAQMD has established a diesel particulate guidance that addresses the potential harms from diesel particulates as being from chronic exposure and set an exposure limit of ten in a million increases over 70 years and a non-cancer hazard index of 1.0. Air dispersion modeling of those emissions is performed using standard methods recommended by regulatory agencies that include U.S. EPA, CARB, and SCAQMD.

c. Potential Project Impacts

This section evaluates potential impacts associated with the Project. Air quality impacts have the potential to cause adverse health effects, as discussed in the Environmental Setting section above. This analysis is presented in the following order:

- Construction Emissions
- Operational Emissions
- Consistency with Air Quality Plans
- Cumulative Air Quality Emissions

(1) Construction Emissions

(a) Construction Emissions – Mass Daily (Regional) Emissions

Construction activities for the Project include site preparation and grading within the undeveloped portions of the Project Site. In addition, the placement of utilities and other infrastructure, placement of foundations for structures, removal of existing structures, and fabrication of new structures would occur at various locations within the Project Site. Construction activities will require the use of heavy trucks, excavating and grading equipment, and other mobile and stationary construction equipment. Emissions during grading and construction will be caused by material handling, traffic on unpaved or unimproved surfaces, exhaust from construction worker vehicle trips, and exhaust from

diesel-powered construction equipment. Particulate matter emissions will also be created from the combustion of diesel fuel by construction equipment and construction worker vehicles. Throughout the construction phases, construction-related emissions will vary day-to-day depending on the specific construction phase.

Grading, soil stockpiling, and subsequent off-site soil export will account for the vast majority of construction emissions. Construction of structures such as an administration addition, chapel, columbarium, crypts, and mausoleums may occur intermittently throughout the construction process. Therefore, the construction emissions analysis includes grading, stockpiling activities, off-site soil export, and building construction. The Project's grading plan proposes three grading areas (Central, East, and West Area) and three phases (Phase 1, 2 and 3). This analysis assumes that off-site export of soil and building construction will not occur concurrently with (i.e., on the same day as) grading or stockpiling and that each Phase (1, 2, and 3) will occur sequentially.

The majority of Project grading would occur in Phase 1 in the Central Area during the first approximately five-year period of the Project (approximately 2011-2016). Approximately 70 acres is anticipated to be graded during Phase 1 with a maximum incremental daily grading area of approximately 5 acres per day.[8] This analysis assumes that truck trips for off-site soil export, concrete, and building materials during Phase 1 would be limited to approximately 70 trips per day[9] and would only occur on days when onsite grading or stockpiling does not occur. Phase 2 would involve the grading of approximately 42 acres (with a maximum of approximately 5 acres of grading per day) in the East Area during the second approximately five-year period of the Project (approximately 2016-2021). This analysis assumes that truck trips for off-site soil export, concrete, and building materials during Phase 2 would be limited to approximately 165 trips per day and would only occur on days when onsite grading or stockpiling does not occur. Phase 3 would occur in the West Area and would involve grading of approximately 34 acres (with a maximum of approximately five acres of grading per day) during the third approximately five-year period of the Project (approximately 2021-2026). This analysis assumes that truck trips for off-site soil export, concrete, and building materials during Phase 3 would be limited to approximately 300 trips per day and would only occur on days when on-site grading or stockpiling does not occur.

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[8] *The maximum incremental grading area of approximately five acres per day is the maximum approximate area that would be graded on any given day (i.e., up to approximately five acres). The total disturbed grading area on the Project Site may be greater than the incremental grading area on any given day.*

[9] *The estimated number of trips described in this section are based on an average trip length of 10 miles per trip. The total number of trips may increase for trips with a shorter length.*

This analysis assumes construction activities would be consistent with SCAQMD Rule 403 (fugitive dust control), and the Project applicant would require the following Project Design Features to be implemented by the construction contractor:

- All scrapers and dozers shall be equipped with Tier 4 Interim engines for Phases 1, 2 and 3, and all other grading construction equipment shall be equipped with Tier 3 engines for Phases 1 and 2, or alternative measures shall be implemented to achieve an equivalent reduction of maximum daily NOx emissions.

- A temporary, aboveground irrigation system shall be developed to regularly water the construction stockpile in the West Area.[10]

Table IV.B-4 on page IV.B-22 represents the estimated maximum construction daily mass (regional) emissions after the implementation of the Project Design Features for Project construction. As shown, the maximum mass daily (regional) construction emissions would not exceed any significance thresholds; therefore, potential impacts are less than significant.

(b) Construction Emissions – Local Significance Thresholds

Estimated maximum ambient concentrations for construction emissions are summarized in Table IV.B-5 on page IV.B-23. As shown, the Project would not exceed any SCAQMD LSTs; therefore, potential impacts would be less than significant.

(c) Construction Emissions – Toxic Air Contaminants

A health risk assessment (HRA) was conducted for the 15-year duration that construction is expected to occur. Diesel particulate matter would be generated during this period from the combustion of diesel fuel from construction equipment and haul trucks from the Project Site. Off-road construction equipment was modeled within the Project Site while the haul trucks were modeled to the nearest highway or freeway (Ventura Freeway). The estimated chronic carcinogenic risk based on a fifteen-year exposure is 2 in a million chronic cancer risk with a hazard index of 0.0056. The SCAQMD threshold is 10 in a million for chronic cancer risk and a hazard index of 1 or greater. Thus, Project construction TACs would be less than significant.

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[10] *The stockpile will be regularly watered using the temporary aboveground irrigation system to achieve an equivalent level of dust control as would occur if the stockpile were watered by hand. See South Coast Air Quality Management District, Mitigation Measures and Control Efficiencies, Table XI-E Mitigation Measure Examples: Fugitive Dust from Storage Piles. http://www.aqmd.gov/cega/handbook/mitigation/fugitive/MM_fugitive.html. See also Cowherd, C. et al, "Control of Open Fugitive Dust Sources," EPA-450/3-88-088, 1988.*

Table IV.B-4
Construction Emissions – Mass Daily (Regional) Emissions

Regional Emissions	Maximum Emissions in Pounds per Day					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase 1 – Central Area Grading						
Grading Fugitive Dust					98.41	20.67
Grading Off-Road Diesel Equipment	27.87	87.15	110.11	0.24	2.94	2.71
Grading On-Road Diesel Equipment	0.86	10.64	3.42	0.01	0.53	0.51
Grading Worker Trips	0.32	0.32	3.14	0.00	0.03	0.03
Total Emissions	**29.06**	**98.10**	**116.67**	**0.26**	**101.91**	**23.92**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Phase 1 – Off-site Soil Export and Structure Construction						
Export Fugitive Dust					28.27	5.94
Export Off-Road Diesel Equipment	3.24	23.31	11.66	0.03	1.39	1.28
Export On-Road Diesel Equipment	4.09	50.52	16.26	0.06	2.43	2.33
Export Worker Trips	0.09	0.08	0.83	0.00	0.01	0.00
Structure Construction Off-Road Diesel Equip.	2.97	23.50	10.90	0.03	1.28	1.17
Structure Construction Worker Trips	0.90	0.90	8.76	0.01	0.09	0.09
Total Emissions	**11.29**	**98.31**	**48.41**	**0.13**	**34.12**	**10.95**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Phase 2 – East Area Grading						
Grading Fugitive Dust					114.83	24.11
Grading Off-Road Diesel Equipment	21.46	79.34	90.72	0.24	2.30	2.12
Grading On-Road Diesel Equipment	0.73	8.53	3.18	0.02	0.44	0.42
Grading Worker Trips	0.24	0.21	2.19	0.00	0.04	0.03
Total Emissions	**22.43**	**88.09**	**96.1**	**0.26**	**117.60**	**26.68**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Phase 2 – Off-site Soil Export and Structure Construction						
Export Fugitive Dust					41.26	8.66
Export Off-Road Diesel Equipment	2.18	16.17	10.51	0.03	0.88	0.81
Export On-Road Diesel Equipment	5.54	64.89	24.22	0.14	3.25	3.12
Export Worker Trips	0.06	0.06	0.58	0.00	0.01	0.00
Structure Construction Off-Road Diesel Equip.	2.08	15.25	9.87	0.03	0.74	0.68
Structure Construction Worker Trips	0.67	0.59	6.10	0.01	0.10	0.10

Table IV.B-4 (Continued)
Construction Emissions – Mass Daily (Regional) Emissions

Regional Emissions	Maximum Emissions in Pounds per Day					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Total Emissions	**10.53**	**96.95**	**51.28**	**0.21**	**46.23**	**13.36**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Phase 3 – West Area Grading						
Grading Fugitive Dust					69.14	4.52
Grading Off-Road Diesel Equipment	17.57	73.18	82.04	0.24	1.67	1.54
Grading On-Road Diesel Equipment	0.24	2.78	1.19	0.01	0.15	0.14
Grading Worker Trips	0.19	0.14	1.60	0.00	0.04	0.04
Total Emissions	**18.01**	**76.10**	**84.83**	**0.25**	**0.99**	**16.23**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Phase 3 – Off-site Soil Export and Structure Construction						
Export Fugitive Dust					55.55	11.67
Export Off-Road Diesel Equipment	3.46	11.54	10.08	0.03	0.55	0.50
Export On-Road Diesel Equipment	6.44	73.70	31.46	0.25	3.71	3.56
Export Worker Trips	0.05	0.04	0.42	0.00	0.01	0.01
Structure Construction Off-Road Diesel Equip.	1.58	10.15	9.48	0.03	0.42	0.39
Structure Construction Worker Trips	0.54	0.40	4.46	0.01	0.10	0.10
Total Emissions	**12.07**	**95.83**	**55.91**	**0.32**	**63.60**	**16.90**
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2007 model.

Source: Christopher A. Joseph & Associates, 2010 and Matrix Environmental, 2010. Calculation sheets are provided in Appendix B.

(2) Operational Emissions

(a) Operational Emissions – Mass Daily (Regional) Emissions

Operational area source emissions would be generated by the consumption of natural gas for space and water heating devices, crematory use, the operation of landscape maintenance equipment, and the application of architectural coatings (paints). Natural gas use was based on calculations made in Section IV.K, Public Utilities. The

Table IV.B-5
Construction Emissions – Local Significance Thresholds

Emissions Source	Criteria Pollutant						
	NO_2 1 hr (ppm)	NO_2 Annual (ppm)	CO 1 hr (ppm)	CO 8 hr (ppm)	PM_{10} 24 hr ($\mu g/m^3$)	PM_{10} Annual ($\mu g/m^3$)	$PM_{2.5}$ 24 hr ($\mu g/m^3$)
Phase 1 Grading Total	0.12	0.029	4.15	2.82	10.21	0.83	2.32
Phase 1 Off-site Soil Export and Structure Construction Total	0.10	0.029	4.02	2.81	7.58	0.91	1.72
Phase 2 Grading Total	0.12	0.029	4.16	2.82	10.19	0.94	2.30
Phase 2 Off-site Soil Export and Structure Construction Total	0.10	0.029	4.02	2.81	10.22	0.95	5.52
Phase 3 Grading Total	0.11	0.029	4.08	2.83	10.32	0.96	3.79
Phase 3 Off-site Soil Export and Structure Construction Total	0.10	0.029	4.02	2.81	10.3	0.97	6.31
Significance Thresholds	**0.18**	**0.03**	**20**	**9**	**10.4**	**1.0**	**10.4**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2007 model.

Source: Christopher A. Joseph & Associates, 2010 and Matrix Environmental, 2010. Calculation sheets are provided in Appendix B.

Project is not expected to generate additional operational daily vehicle trips; therefore, motor vehicle emissions were not evaluated. The results of these calculations are presented in Table IV.B-6 on page IV.B-25. As shown, Project estimated maximum mass daily (regional) operational emissions do not exceed any SCAQMD thresholds. Operational emissions, therefore, would be less than significant.

(b) Operational Emissions – Local Significance Thresholds

Estimated maximum ambient concentrations for operation emissions are summarized in Table IV.B-7 on page IV.B-25. As shown, the Project would not exceed any SCAQMD LSTs; therefore, impacts would be less than significant.

(c) Operational Emissions – Toxic Air Contaminants

Project operational emissions could be generated by natural gas consumption for space and water heating, landscape maintenance equipment, consumer products, and architectural coatings. These type of operational emissions for a commercial use such as the Project do not have the potential for causing a significant health risk to sensitive receptors.

Table IV.B-6
Operational Emissions – Maximum Mass Daily (Regional) Emissions

Emissions Source	Emissions in Pounds per Day					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Proposed Operational Emissions						
Natural Gas	0.30	4.14	3.48	0.00	0.01	0.01
Landscape Maintenance Equipment	0.37	0.06	4.64	0.00	0.02	0.02
Architectural Coatings	0.35					
Total Operational Emissions	**1.02**	**4.20**	**8.12**	**0.00**	**0.03**	**0.03**
Significance Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2007 model.

Source: Christopher A. Joseph & Associates, 2010 and Matrix Environmental 2010. Calculation sheets are provided in Appendix B.

Table IV.B-7
Operational Emissions – Local Significance Thresholds

Emissions Source	Criteria Pollutant						
	NO_2 1 hr (ppm)	NO_2 Annual (ppm)	CO 1 hr (ppm)	CO 8 hr (ppm)	PM_{10} 24 hr ($\mu g/m^3$)	PM_{10} Annual ($\mu g/m^3$)	$PM_{2.5}$ 24 hr ($\mu g/m^3$)
Area Sources	0.092	0.029	4.018	2.802	0.021	0.005	0.021
Significance Thresholds	**0.18**	**0.03**	**20**	**9**	**10.4**	**1.0**	**10.4**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2007 model.

Source: Christopher A. Joseph & Associates, 2010 and Matrix Environmental, 2010. Calculation sheets are provided in Appendix B.

Operations will involve grave site development using haul trucks that will generate diesel particulate matter emissions. Only a relatively small number of haul truck trips are anticipated on any given day, making it very unlikely that the diesel particulate emissions could result in a significant health risk to sensitive receptors. Moreover, no incremental increase in the rate of grave site development is expected, so diesel particulate emissions would not increase over current baseline conditions. Therefore, operational emissions from haul trucks would be less than significant.

A crematory is proposed as a potential component of the Project, although operation of the crematory is only anticipated to occur, if at all, after completion of grading activities. Operational emissions from the crematory would be dependent on the specifications of the burners used for combustion as well as the processing rate. The operational emissions associated with the crematory would include toxic air contaminants which are regulated under SCAQMD Rule 1401. Therefore, any proposed crematory would be required to implement Toxic Best Available Control Technology (T-BACT) (e.g., afterburner) as part of pre-construction permit review for compliance with SCAQMD Rule 1401. Nevertheless, it is anticipated that the operation of the proposed crematory would be similar in size and scope to a crematory currently operated at the Forest Lawn facility in Glendale, California. Emissions associated with the Glendale facility have not led to an exceedence of air quality standards or significant health risks. Prior to operation, the proposed crematory would have to obtain an operating permit from SCAQMD. If necessary, the operating permit would include conditions that ensure health risk standards are not exceeded. In other words, the crematory will not be permitted to operate unless health risk impacts would be below SCAQMD's significance thresholds.

Toxic air contaminant emissions associated with Project operations would not cause health risks that exceed SCAQMD significance thresholds. As such, potential impacts would be less than significant.

(3) Consistency With Air Quality Plans

SCAQMD's 2007 Air Quality Management Plan (AQMP) was prepared to accommodate growth, to reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, and to minimize the impact on the economy. A project is considered consistent with the 2007 AQMP provided its population growth is consistent with the growth projections used in preparing the 2007 AQMP. Since the Project would not generate an increase in population, the Project is consistent with the 2007 AQMP.

The Project is also consistent with the Air Quality Element of the City of Los Angeles General Plan. The Project is a centrally-located development that will not increase local or regional traffic and may reduce vehicle miles traveled to cemeteries located further from

major population centers. Thus, the central location of the Project is consistent with Air Quality Element goals to reduce vehicle miles traveled and mobile source emissions. The Project will implement Project Design Features to reduce air quality and climate change emissions. The Project will not cause any significant air quality impacts. As a result, the Project is consistent with the Air Quality Element of the City of Los Angeles General Plan.

4. Cumulative Impacts

With regard to cumulative air quality impacts, SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project specific impacts. As discussed previously, impacts from construction activities would be less than significant. Therefore, construction emissions would be cumulatively less than significant. The operational emissions associated with the Project would not exceed the recommended thresholds and would not be cumulatively significant.

As discussed above, the Project is consistent with the 2007 AQMP based on population and housing forecasts. In addition, the Project development would not jeopardize attainment of air quality standards in the 2007 AQMP for the Basin and the Los Angeles County portion of the Basin. No cumulative impacts associated with the 2007 AQMP would result.

5. Mitigation Measures

As analyzed in this section, construction and operation of the Project would not have the potential to result in significant air quality impacts, and as such mitigation measures are not required.

6. Level of Significance After Mitigation

Construction and operation of the Project would result in less than significant air quality impacts with incorporation of the project design features set forth above.

1. Introduction

This section provides a discussion of global climate change, existing regulations pertaining to global climate change, an inventory of the approximate greenhouse gas (GHG) emissions that would result from the Project, and an analysis of the significance of the impact of these GHGs. Calculation worksheets, analysis assumptions, and model outputs used in this evaluation are presented in Appendix B of this EIR.

2. Environmental Setting

a. Air Quality Background

Global climate change refers to changes in average global climatic conditions, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena but data indicate that the current global conditions differ from past climate changes in cause, rate and magnitude.

GHGs allow high frequency shortwave solar radiation to enter Earth's atmosphere, but retain some of the low frequency infrared energy which is radiated back from Earth towards space, resulting in a warming of the atmosphere. This phenomenon is known as the "greenhouse effect." Increased concentrations of GHGs in Earth's atmosphere may potentially lead to global climate change and potentially such conditions as rising surface temperatures, melting icebergs and snowpack, rising sea levels, and the increased frequency and magnitude of severe weather conditions. Existing climate change models also show that climate warming portends a variety of impacts on agriculture, including loss of microclimates that support specific crops, increased pressure from invasive weeds and diseases, and loss of productivity due to changes in water reliability and availability.

The six most globally important human-influenced GHGs include carbon dioxide (CO_2), methane, nitrous oxide, haloalkanes, perfluorocarbons, and sulfur hexafluoride. These gases have different potentials for trapping heat in the atmosphere, called global

warming potential. Carbon dioxide is the most abundant GHG in the atmosphere. Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the equivalent mass of CO_2, denoted as carbon dioxide equivalent (CO_{2e}). For example, one pound of methane has 21 times more heat capturing potential than one pound of carbon dioxide, and sulfur hexafluoride has 23,900 times more heat capturing potential than one pound of CO_2. The global warming potentials for common GHGs are shown in Table IV.B-8 on page IV.B-30.

GHGs are the result of both natural and human-influenced activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooling are the primary sources of greenhouse gas emissions. Without human intervention, Earth maintains an approximate balance between the emission of GHGs into the atmosphere and the storage of greenhouse gases in oceans and terrestrial ecosystems. Increased combustion of fossil fuels (e.g., gasoline, diesel, coal), have contributed to the rapid increase in atmospheric levels of GHGs over the last 150 years.

As reported by the California Energy Commission, California contributes 1.4 percent of global and 6.2 percent of national GHG emissions.[11] Approximately 80 percent of greenhouse gases in California are carbon dioxide produced from fossil fuel combustion. A recent GHG inventory for California is presented in Table IV.B-9 on page IV.B-30.[12]

The primary effect of rising global concentrations of atmospheric GHG levels has been a rise in the average global tropospheric temperature of approximately 0.2 degrees Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming is likely to occur given the expected rise in global atmospheric GHG concentrations from innumerable sources of GHG emissions worldwide,[13] which would induce further changes in the global climate system during the current century. Adverse

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[11] *California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, CEC-600-2006-013, October 2006.*

[12] *Source: California Greenhouse Gas Inventory for 2000-2006; http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_2009-03-13.pdf*

[13] *See, e.g., Environmental Protection Agency, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009) ("cumulative emissions are responsible for the cumulative change in the stock of concentrations in the atmosphere"); see also 74 Fed. Reg. 66496, 66538 (same in Final Endangerment Finding).*

Table IV.B-8
Global Warming Potentials

Gas	Atmospheric Lifetime (years)	Global Warming Potential (Carbon Dioxide Equivalent)
Carbon Dioxide	50 – 200	1
Methane	12	21
Nitrous Oxide	120	310
Haloalkanes – 23	264	11,700
Haloalkanes -134a	14.6	1,300
Haloalkanes -152a	1.5	140
Perfluorocarbons: Tetrafluoromethane	50,000	6,500
Perfluorocarbons: Hexafluoroethane	10,000	9,200
Sulfur Hexafluoride	3,200	23,900

Sources: U.S. EPA 2006. Non Carbon Dioxide Gases Economic Analysis and Inventory, December 2006.

Table IV.B-9
2006 California Greenhouse Gas Inventory

GHG Emissions Source	CO_{2e} in Million Metric Tons per Year
Transportation Sector	185.77
Electric Power Sector	105.92
Commercial and Residential Sector	44.37
Industrial Sector	96.05
Recycling and Waste	6.31
Gases with High Global Warming Potential	15.15
Agriculture Sector	30.13
Forestry Sector	0.19
Total Emissions	**479.80**

Sources: U.S. EPA 2006. Non Carbon Dioxide Gases Economic Analysis and Inventory, December 2006.

impacts from global climate change worldwide and in California may include but may not be limited to:

- Declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[14]

- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;[15]

- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[16]

- Declining Sierra snowpack levels, which account for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;[17]

- Increasing the number of days conducive to ozone formation by 25 to 85 percent (depending on the future temperature scenario) in high ozone areas located in the Southern California area and the San Joaquin Valley by the end of the 21st century;[18] and

- Increasing the potential for erosion of California's coastlines and sea water intrusion into the Sacramento Delta and associated levee systems due to the rise in sea level.[19]

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[14] *Ibid.*

[15] *Intergovernmental Panel on Climate Change, "Climate Change 2007."*

[16] *Ibid.*

[17] *California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature. 2006.*

[18] *Ibid.*

[19] *Ibid.*

b. Regulatory Setting

(1) Federal

The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO_2 and other GHGs are pollutants under the federal Clean Air Act, which the United States Environmental Protection Agency (U.S. EPA) must regulate if it determines they pose an endangerment to public health or welfare. On April 24, 2009, U.S. EPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare, which was finalized in December 2009, and became effective on January 14, 2010.[20]

The Clean Energy Act of 2007 created new federal requirements for increased fleet-wide fuel economy for passenger vehicles and light trucks. In addition, on May 19, 2009, President Barack Obama announced a new National Fuel Efficiency Policy aimed at increasing fuel economy and reducing greenhouse gas pollution. The new National Fuel Efficiency Policy is expected to increase fuel economy by more than five percent by requiring a fleet-wide average of 35.5 miles per gallon by 2016 starting with model years 2012.

(2) State

In June 2005, Governor Schwarzenegger signed Executive Order S-3-05, which established GHG emissions targets for the state. In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, into law. AB 32 commits the State to achieving the following:

- 2000 GHG emission levels by 2010 (which represents an approximately 11 percent reduction from business as usual).
- 1990 GHG emission levels by 2020 (approximately 30 percent below business as usual).

To achieve these goals, AB 32 mandates that the California Air Resources Board (CARB) establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and

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[20] *See, generally, http://www.epa.gov/climatechange/endangerment.html.*

develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. The following schedule outlines the CARB actions mandated by AB 32:

- By January 1, 2008, CARB adopts regulations for mandatory GHG emissions reporting, defines 1990 emissions baseline for California (including emissions from imported power), and adopts it as the 2020 statewide cap.[21]
- By January 1, 2009, CARB adopts plan to effect GHG reductions from significant sources of GHG via regulations, market mechanisms and other actions.[22]
- During 2009, CARB drafts rule language to implement its plan and holds a series of public workshops on each measure (including market mechanisms).
- By January 1, 2010, early action measures will take effect.
- During 2010, CARB, after workshops and public hearings, conducts series of rulemakings to adopt GHG regulations, including rules governing market mechanisms.
- By January 1, 2011, CARB completes major rulemakings for reducing GHGs, including market mechanisms. CARB may revise and adopt new rules after January 1, 2011 to achieve the 2020 goal.
- By January 1, 2012, GHG rules and market mechanisms adopted by CARB take effect and become legally enforceable.
- December 31, 2020 is the deadline for achieving the 2020 GHG emissions cap.

Executive Order S-01-07 requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard as an early measure listed above.

AB 1493 (Pavley Standard) requires CARB to adopt regulations to reduce GHG emissions for noncommercial passenger vehicles and light-duty trucks of model year 2009

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[21] *CARB has adopted 427 million metric tonnes of carbon dioxide equivalent ($MMTCO_{2e}$) as the total statewide greenhouse gas 1990 emissions level and the 2020 emissions limit. See http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm (last visited 8/14/2008).*

[22] *CARB released the Climate Change Proposed Scoping Plan in October 2008, which details the strategies that the State will use to reduce GHG emissions. The Plan was approved at the CARB hearing in December 2008.*

and thereafter. The bill requires the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. California petitioned U.S. EPA in December 2005 to allow more stringent standards. On July 1, 2009, U.S. EPA granted California a waiver which will enable the state to enforce stricter tailpipe emissions on new motor vehicles.

In 2006, under Senate Bill 107, California's Renewables Portfolio Standard (RPS) requires retail suppliers of electric services to increase procurement from eligible renewable energy resources to 20 percent by 2010. While it is unlikely that the RPS target will be achieved by 2010, it will almost certainly be achieved by the year Project operations commence. Pursuant to Executive Order S-21-09, the California Air Resources Board also is currently preparing regulations to supplement RPS with a Renewable Energy Standard that will result in a total renewable energy requirement for utilities of 33 percent by 2020.[23]

A companion bill to AB 32, Senate Bill 1368, requires the California Public Utilities Commission and California Energy Commission to establish GHG emission performance standards for the generation of electricity. These standards will also generally apply to power that is generated outside of California and imported into the State. Senate Bill (SB) 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting CARB to meet its mandate under AB 32. On January 25, 2007, the California Public Utilities Commission adopted an interim GHG Emissions Performance Standard, which is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have GHG emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour (MW/hr). Further, on May 23, 2007, the California Energy Commission adopted regulations that establish and implement an identical Emission Performance Standard of 1,100 pounds of CO_2 per MW/hr.

California's Renewable Portfolio Standard requires utilities to procure 20 percent of their electricity from renewable sources by 2010. CARB also is currently preparing regulations to supplement RPS with a Renewable Energy Standard that will result in a total renewable energy requirement for utilities of 33 percent by 2020.[24]

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[23] *See generally, California Air Resources Board Website regarding the Renewable Energy Standard rulemaking process at http://www.arb.ca.gov/energy/res/res.htm (last visited on January 5, 2010).*

[24] *Ibid.*

California Senate Bill 97, passed in August 2007, is designed to work in conjunction with CEQA and AB 32. Senate Bill 97 requires the Office of Planning and Research to prepare and develop guidelines for the mitigation of GHG emissions or the effects thereof, including but not limited to, effects associated with transportation and energy consumption. On December 30, 2009, the Natural Resources Agency adopted the GHG CEQA Guidelines amendments. The Natural Resources Agency transmitted the amendments to the Office of Administrative Law on December 31, 2009. The adopted amendments will become effective 30 days after the Office of Administrative Law completes its review and submits them to the Secretary of State for inclusion in the California Code of Regulations.[25]

Senate Bill 375 links regional planning for housing and transportation with the greenhouse gas reduction goals outlined in AB 32. Reductions in GHG emissions would be achieved by, for example, locating housing closer to jobs, retail, and transit. Under the bill, each Metropolitan Planning Organization would be required to adopt a sustainable community strategy to encourage compact development so that the region will meet a target, created by CARB, for reducing GHG emissions.

The California Climate Action Team (CAT), comprised of representatives from various resource agencies in California, is responsible for implementing global warming emissions reduction programs. The 2006 CAT Report identified key measures that will help ensure that California will meet the GHG reduction goals established under the Governor's Executive Order S-3-05 (1990 levels by 2020 and 80 percent below 1990 levels by 2050).

(3) Regional

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group.[26] Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to the SCAQMD staff on developing the significance thresholds. On October 8, 2008, SCAQMD released the Draft AQMD Staff CEQA Greenhouse Gas

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[25] *See Natural Resources Agency website for the Final Statement of Reasons and the Adopted Text of the CEQA Guidelines Amendments (Adopted December 30, 2009), http://ceres.ca.gov/ceqa/guidelines/, last visited on January 15, 2010.*

[26] *See SCAQMD website: http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html.*

Significance Threshold.[27] These thresholds have not been finalized and continue to be developed through the working group.

(4) Local

The City of Los Angeles adopted a green building ordinance (Ordinance 179,820) in April 2008 to address the impact on climate change from new development. The new ordinance establishes the Green Building Program, whereby certain new development projects of 50,000 square feet of enclosed floor area or more or more than 50 residential units must at a minimum meet the intent of the "certified" performance level under the US Green Building Council's Leadership in Energy and Environmental Design program (LEED). The Green Building Program does not apply to the Project, which does not include more than 50,000 square feet of occupiable floor area or any residential units.

The City of Los Angeles published the "*Green LA: An Action Plan to Lead the Nation in Fighting Global Warming*" (Green LA Plan) outlining the goals and actions the City has established to reduce GHGs from both public and private activities. According to the Green LA Plan, the City of Los Angeles is committed to the goal of reducing emissions of CO_2 to 35 percent below 1990 levels by 2030.

3. Environmental Impacts

a. Thresholds of Significance

The analysis of GHG emissions is different from the analysis of criteria pollutants. For criteria pollutants, significance thresholds have been established by SCAQMD based on ambient air quality standards. For GHG emissions, however, no significance thresholds have been established by the State, SCAQMD or the City of Los Angeles. Thus, there is no established methodology for analyzing GHG emissions and determining the significance of those emissions in the context of an EIR.

The California Attorney General's Office has taken an active role in addressing climate change in CEQA documents. The Attorney General's Office has created and routinely updates a Fact Sheet listing project design features to reduce greenhouse gas

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[27] *SCAQMD, "Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold," October 8, 2008, available at: www.aqmd.gov/ceqa/handbook/GHG/GHG.htm.*

emissions.[28] The Attorney General's Office created the Fact Sheet primarily for the benefit of local agencies processing CEQA documents, noting that "local agencies will help to move the State away from 'business-as-usual' and toward a low-carbon future." The Fact Sheet explains that the listed "measures can be included as design features of a project," but emphasizes that they "should not be considered in isolation, but as part of a larger set of measures that, working together, will reduce greenhouse gas emissions and the effects of global warming."

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a guidance document that identified a number of potential approaches for evaluating the significance of GHG emissions in CEQA documents.[29] CAPCOA suggested that a lead agency evaluate the significance of a project's GHGs on a case-by-case basis when no applicable thresholds have been adopted. CAPCOA identified a number of potential methods to evaluate projects on a case-by-case basis, including: establishing a threshold below which project GHG emissions would not contribute to a significant impact; evaluating a project's consistency with adopted GHG regulations, plans and policies; and demonstrating a project reduces its GHG emissions by a specified percentage.

In October 2008, Staff for SCAQMD released a *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD Draft GHG Guidance Document) that provided a tiered approach for considering GHG emissions from an individual project. According to the SCAQMD Draft GHG Guidance Document, a project would have a less than significant GHG impact if it falls into one of five tiers, generally defined as follows:[30]

- Tier 1: A CEQA exemption applies.
- Tier 2: The Project is consistent with an approved GHG reduction plan.

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[28] *California Attorney General's Office Fact Sheet, The CEQA – Addressing Global Warming Impacts at the Local Agency Level, available at: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf).*

[29] *CAPCOA, "CEQA & Climate Change," January 2008, available at http://www.capcoa.org/rokdownloads/CEQA/CAPCOA White Paper.pdf.*

[30] *SCAQMD, "Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold," p. 3-10, October 2008, available at: http://www.aqmd.gov/ceqa/handbook/GHG/2008/oct22mtg/oct22.html (last visited January 20, 2010).*

- Tier 3: The Project GHG emissions are less than 3,000 $MTCO_{2e}$/year for commercial projects if reduction targets related to energy and water use are also met.

- Tier 4: The Project meets a performance standard of reducing emissions 30 percent below "business as usual."

- Tier 5: Project offsets or mitigation measures achieve targets in Tiers 1 through 4.

On April 13, 2009, the Office of Planning and Research (OPR) transmitted proposed amendments to the CEQA Guidelines covering the analysis of GHG in CEQA documents to the California Natural Resources Agency (the "GHG CEQA Guidelines").[31] After public comment and subsequent revisions, the California Natural Resource Agency adopted the GHG CEQA Guidelines on December 30, 2009.[32] The following two questions relating to the effects of GHGs were added to the CEQA Guidelines, Appendix G (Environmental Checklist) based on OPR's recommended amendments.

Would the project:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Notably, the GHG CEQA Guidelines amendments do not establish a significance threshold for GHG emissions. According to the Final Statement of Reasons for Regulatory Action:[33]

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[31] *Public Resource Code Section 21083.05 requires the Office of Planning and Research to prepare, and the Resources Agency to certify and adopt, guidelines for the mitigation of GHG emissions by January 1, 2010.*

[32] *The Office of Administrative Law has 30 working days from the adoption to transit the guidelines to the Secretary of State for inclusion in the California Code of Regulations. The GHG CEQA Guidelines, as adopted by the Natural Resources Agency on December 30, 2009, will be followed by this EIR analysis unless substantial revisions are triggered by the Office of Administrative Law review.*

[33] *Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009, p. 85, available at: http://ceres.ca.gov/ceqa/guidelines/.*

> *[N]othing in either AB32 or SB97 requires a finding of significance for any particular level of increase in greenhouse gas emissions. AB32, and regulations implementing that statute, will require reductions in emissions from certain sectors in the economy, but do not preclude new emissions. Moreover…the proposed amendments do not establish a zero emissions threshold of significance because — "there is no one molecule rule in CEQA." (Communities for a Better Environment v. California Resources Agency (2002) 103 Cal.App.4th 98, 120.)*

Instead, lead agencies must either establish significance thresholds for their respective jurisdictions or determine significance on a case-by-case basis. The lead agency should use its "careful judgment" in making a determination of significance,[34] and should make a "good-faith" effort to "describe, calculate or estimate" the amount of GHGs that will result from the project.[35] The lead agency is given the discretion to select a reasonable model and methodology to quantify GHGs and to rely on a qualitative analysis or performance based standards for its determination.[36] A lead agency should also "consider" the following factors, among others, when assessing the significance of impacts from GHGs: (1) the extent to which the project may increase or reduce GHGs; (2) whether the GHG emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, local plan for the reduction or mitigation of GHG emissions.[37]

For the Project, no applicable significance threshold for GHG emissions has been adopted by the State, SCAQMD or the City of Los Angeles. Although State, regional, and local plans and policies have been adopted to help address climate change (see discussions above), no current law or regulation would regulate all aspects of the Project's GHG emissions. Accordingly, the potential significance of the Project's GHG emissions will be evaluated on a case-by-case basis by carefully considering the Project's expected GHG emissions in the context of State, regional, and local plans to address climate change. This approach is consistent with the State CEQA Guidelines and CAPCOA's guidance, discussed above.

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[34] *GHG CEQA Guidelines § 15064.4(a).*

[35] *Ibid.*

[36] *GHG CEQA Guidelines § 15064.4(a)(1)-(2).*

[37] *GHG CEQA Guidelines § 15064.4(b).*

b. Greenhouse Gas Emissions Analysis Methodology

An inventory of the Project's GHG emissions in CO_{2e} was calculated using methodologies described in the California Climate Action Registry General Reporting Protocol (version 3.1) published in January 2009.[38] Additional discussion about the climate change analysis methodology is provided in the cumulative impacts section.

c. Potential Project Impacts

Potential risks associated with climate change are associated with increasing concentrations of atmospheric GHG levels over time. Atmospheric concentrations of GHG are predicted to increase because of growing emissions from innumerable sources worldwide.[39] The relatively negligible GHG emissions associated with any individual source, as compared to global GHG emissions, are unlikely to have any quantifiable impact, let alone a significant impact, on atmospheric GHG concentrations. It would also be speculative to attempt to identify specific climate-related impacts resulting from the emissions of a single source or project. Accordingly, the significance of an individual project's contribution to global atmospheric GHG levels is best evaluated in the context of other cumulative emissions.[40] Thus, the significance of the Project's contribution to rising atmospheric GHG concentrations is evaluated in the cumulative impacts analysis.

At the Project level, the GHG CEQA Guidelines call for an analysis of whether the Project will expose sensitive receptors to potentially hazardous conditions.[41] The Project would not involve the siting of any sensitive developments, such as a residence, hospital or school. The Project involves expanding existing cemetery uses, which would not result in any significant exposure risks to hazardous conditions.

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[38] *California Climate Action Registry General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions, January 2009.*

[39] *See, e.g., Environmental Protection Agency, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009) ("cumulative emissions are responsible for the cumulative change in the stock of concentrations in the atmosphere"); see also 74 Fed. Reg. 66496, 66538 (same in Final Endangerment Finding).*

[40] *See ibid.*

[41] *GHG CEQA Guidelines § 15126.2.*

4. Cumulative Impacts

a. Quantification of Project's GHG Emissions

Construction and operational GHG emissions for the Project have been calculated in metric tons per year. For construction, CO_2 emissions generated by on-site equipment and vehicle travel were estimated using CARB OFFROAD Model and EMFAC2007 emission factors generated by SCAQMD. Methane and nitrous oxide emissions were also calculated based the estimated ratio between methane and nitrous oxide to CO_2 derived using the California Climate Action Registry (CCAR) General Reporting Protocol (version 3.1) published in January 2009. The energy associated with water use for fugitive dust control was then calculated based on the average active area disturbed per day. The annual water usage was calculated based on a water application rate of 1,703 gallons per acre per day, which is equivalent to watering the active construction area three times daily.[42] Construction emissions are included with operational emissions by amortizing construction emissions on an annual basis over the 50-year life of the Project. Given the nature of the Project as a cemetery use, a 50-year Project life is highly conservative because actual operations will likely continue for a much longer period.

During operation of the Project, GHG emissions are created by: the consumption of fossil fuels to generate electricity; the use of natural gas for Project Site land uses; the conveyance of water; solid waste generation; and consumption of fuel by landscaping vehicles. The fuel consumption rates, water use rates, and solid waste generation rates for the Project are calculated and reported in Section IV.K, Public Utilities. The GHG emission factors from the CCAR Protocol for natural gas and electricity were then applied to the respective consumption rates to calculate annual GHG emissions in metric tons. GHG emissions from water consumption were determined by evaluating the water-related energy use relationship identified in the California Energy Commission's California Water-Energy Relationship report.[43] The GHG emission rate associated with Project waste was obtained from the U.S. EPA's Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks. The landscape equipment emissions associated with the Project were estimated using the URBEMIS 2007 computer model. Additional details about the calculation of Project GHG emissions are provided in Appendix B.

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[42] *Air & Waste Management Association, Air Pollution Engineering Manual (Second Edition).*

[43] *California Energy Commission, California's Water – Energy Relationship, November 2005, prepared in Support of the 2005 Integrated Energy Policy Report Proceeding (04-IEPR-01E), CEC-700-2005-011-SF.*

Table IV.B-10 on page IV.B-43 provides the Project's estimated annual GHG emissions. Project Design Features have been incorporated to reduce GHG emissions, which include:

- Use of Reclaimed Water – The Project will use reclaimed water for at least 95 percent of the Project's landscaping irrigation requirements and construction activities.[44]

- Water Conservation – The Project will reduce the rate of water use compared to existing operations by at least 10 percent over the life of the Project. Reduction measures may include: education on water conservation; use of high efficiency irrigation systems, such as weather-based irrigation controllers with rain shutoff technology or SMART irrigation controllers; hydro-zoning; or use of native/drought resistant plant materials in areas of the park not used for interments or services.

- Green Waste Diversion – The Project will divert at least 65 percent of the green waste (grass clippings and tree clippings) associated with Project operations.

- Energy Conservation – The Project will reduce electricity needs for new facilities associated with the Project by at least 10 percent from current rates associated with existing facilities. Energy conservation measures may include: education on energy conservation; energy efficient lighting; use of solar panels; and/or participation in LADWP's Green Power Program.

Table IV.B-10 compares the Project with Project Design Features against the Project if it were built according to legal and regulatory requirements.

Although not quantified in this analysis, the following planned State and local actions, when implemented, will almost certainly decrease GHG emissions from the Project. Thus, actual Project GHG emissions will likely be much lower than the emissions presented in Table IV.B-10:

- California's RPS requiring utilities to procure 20 percent of their electricity from renewable sources by 2010. While it is unlikely that the RPS target will be achieved by 2010, it will almost certainly be achieved by the year Project

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[44] *Reclaimed water has a lower GHG emissions profile than potable water because the energy needed to deliver reclaimed water to the Project Site is significantly lower than the delivery of potable water. See Appendix B for additional information.*

Table IV.B-10
Project Greenhouse Gas Emissions

Pollutant	GHG Emissions in Metric Tons per Year	
	Project GHG Emissions: Meeting Legal and Regulatory Requirements	**Project GHG Emissions: Including Project Design Features**
Annualized Construction Emissions	968	966
Operational Emissions		
Natural Gas Consumption	236	236
Electricity Generation	279	251
Landscape Equipment	1	1
Water Use	922	147
Solid Waste Generation	11	7
Total (annual emissions)	*1,449*	*643*
Annualized Total	*2,417*	*1,609*
Percent Reduction of GHG Emissions Compared to Meeting Legal and Regulatory Requirements		**33%**

Source: Christopher A. Joseph & Associates, 2009 and Matrix Environmental, 2010. Calculation sheets are provided in Appendix B.

operations commence. The California Air Resources Board also is currently preparing regulations to supplement the RPS

with a Renewable Energy Standard that will result in a total renewable energy requirement for utilities of 33 percent by 2020.[45]

- Implementation of the Low Carbon Fuel Standard reducing GHG emissions from motor vehicles by 10 percent.
- CARB Scoping Plan goal to increase heavy-duty vehicle fuel efficiency by 15 percent.
- Green LA Plan goal to decrease emissions from Department of Water and Power electrical generation and import activities.

[45] *See generally, California Air Resources Board Website regarding the Renewable Energy Standard rulemaking process at: http://www.arb.ca.gov/energy/res/res.htm (last visited on January 5, 2010).*

- Green LA Plan goal to achieve 90 percent solid waste diversion.

b. Potential Impact of Project GHG Emissions

The GHG CEQA Guidelines do not establish a significance threshold for GHG emissions. According to the Final Statement of Reasons for Regulatory Action:[46]

> *[N]othing in either AB 32 or SB 97 requires a finding of significance for any particular level of increase in greenhouse gas emissions. AB 32, and regulations implementing that statute, will require reductions in emissions from certain sectors in the economy, but do not preclude new emissions.*

Instead, the GHG CEQA Guidelines call for a lead agency to establish significance thresholds for their respective jurisdiction or determine the significance of a project on a case-by-case basis. The lead agency should use its "careful judgment" in making the determination of significance,[47] and should make a "good-faith" effort to "describe, calculate or estimate" the amount of GHGs that will result from the project.[48] The lead agency may rely on a qualitative analysis or performance based standards for its determination.[49] A lead agency should also "consider" the following factors, among others, when assessing the significance of impacts from GHGs: (1) the extent to which the project may increase or reduce GHGs; (2) whether the GHG emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, local plan for the reduction or mitigation of GHG emissions.[50] These factors are addressed in turn.

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[46] *Natural Resources Agency, Final Statement of Reasons for Regulatory Action, December 2009, p. 85, available at: http://ceres.ca.gov/ceqa/guidelines/.*

[47] *GHG CEQA Guidelines § 15064.4(a).*

[48] *Ibid.*

[49] *GHG CEQA Guidelines § 15064.4(a)(1)-(2).*

[50] *GHG CEQA Guidelines § 15064.4(b).*

(1) Extent To Which Project May Increase or Decrease GHG Emissions

As shown in Table IV.B-10 on page IV.B-43, the Project's annual operational GHG emissions are expected to be 1,609 $MTCO_{2e}$/year. It is unclear, however, whether these emissions represent an increase over the environmental baseline. Although the Project's gross GHG emissions have been quantified, it is possible that the Project would not result in a net increase of GHG emissions if the Project displaces existing GHG emissions associated with other cemetery uses. The Project reflects a market demand for interment space. Given the Project's central location and proximity to a major freeway, it is possible that the Project would displace the use of cemeteries located in more remote areas, thus reducing the GHG emissions associated with the greater vehicle travel. Nonetheless, given the difficulty in quantifying whether the Project would result in a "net" increase or decrease in emissions, this analysis conservatively assumes that all construction and operational Project GHG emissions represent an increase over the environmental baseline. As noted above, an increase in GHG emissions does not trigger an automatic determination of significance.[51]

The Project's operational emissions are relatively minor for a commercial project. According to the SCAQMD Draft GHG Guidance Document,[52] commercial projects emitting less than 3,000 $MTCO_{2e}$/yr are less than significant.[53] As shown in Table IV.B-10, the Project would emit approximately half this threshold (1,609 $MTCO_{2e}$/yr, or 54 percent of threshold). Although the draft SCAQMD Staff GHG thresholds have not been finalized, the Project's low operational GHG emissions are relevant to the overall significance determination.

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[51] *See also CEQA Guidelines § 15064(h)(4): "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."*

[52] *SCAQMD, "Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold," p. 3 10, October 2008, available at: http://www.aqmd.gov/ceqa/handbook/GHG/2008/oct22mtg/oct22.html (last visited January 20, 2010).*

[53] *The SCAQMD Draft GHG Guidance Document also states that a commercial project below the 3,000 $MTCO_{2e}$/yr threshold must meet certain unspecified GHG reduction standards. The Project Design Features substantially reduce the Project's GHG emissions below legal and regulatory requirements.*

(2) Applicability of Established GHG Significance Threshold

For the Project, no applicable significance threshold for GHG emissions has been adopted by the State, SCAQMD or the City of Los Angeles. Although State, regional, and local plans and policies have been adopted to help address climate change, no current law or regulation would regulate all aspects of the Project's GHG emissions. Accordingly, the potential significance of the Project's GHG emissions will be evaluated on a case-by-case basis, by carefully considering the Project's expected GHG emissions in the context of applicable State, regional and local laws, regulations, plans or policies to address climate change.

(3) Compliance With Applicable Laws, Regulations, Plans or Policies to Reduce GHG Emissions

Unlike criteria pollutant emissions or toxic air contaminants, climate change impacts are associated with global emissions, instead of local or regional emissions. Atmospheric concentrations of GHG are expected to increase over time because of increasing GHG emissions from innumerable sources across the world.[54] Potential impacts from climate change are associated with these increasing atmospheric concentrations of GHGs.[55] Thus, an evaluation of the significance of the Project's GHG emissions under CEQA is best considered in the context of State, regional and local efforts to slow or reverse the rate of increase in atmospheric GHG concentrations.

The State has mandated a goal of reducing statewide emissions to 1990 levels by 2020 under AB 32, even though statewide population and commerce is predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce statewide greenhouse gas emissions. The Climate Change Scoping Plan proposes a "comprehensive set of actions designed to reduce overall carbon greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and

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[54] *See, e.g., Environmental Protection Agency, Draft Endangerment Finding, 74 Fed. Reg. 18886, 18904 (April 24, 2009); see also 74 Fed. Reg. 66496, 66538 (same in Final Endangerment Finding).*

[55] *Evidence of the cumulative rise of atmospheric GHG concentrations based on innumerable global sources of GHG, and potential impacts in California associated with rising atmospheric GHG concentrations, is presented in detail in the Environmental Setting section of this analysis and is incorporated into this cumulative impact analysis.*

enhance public health."[56] The Climate Change Scoping Plan indicates that reducing GHG emissions to 1990 levels requires cutting GHG emissions by approximately 28.4 percent from business-as-usual levels projected for 2020.

The Project will implement Project Design Features to cut GHG emissions by 33 percent below regulatory requirements. Actual Project GHG emissions will likely be much lower than presented in Table IV.B-10 on page IV.B-43 because of the inclusion of adopted regulations such as RPS and Low Carbon Fuel Standard, which would be factored into the Project's GHG reductions if the Project were compared to a "business as usual" scenario. Project Design Features require the use of reclaimed water for irrigation, water conservation measures, energy reduction measures, and green waste diversion measures. The Project is a centrally-located development that will not increase local or regional traffic. The central location of the Project is consistent with GHG reduction policies to reduce vehicle miles traveled by encouraging infill development. With the implementation of the Project Design Features, the Project is consistent with the goals of AB 32 and the CARB Scoping Plan. Similarly, the Project is consistent with applicable provisions of the Attorney General Fact Sheet and the 2006 Climate Action Team Report. See Appendix B for additional analysis of the Attorney General Fact Sheet and 2006 Climate Action Team Report.

The Project is consistent with the SCAQMD Draft GHG Guidance Document. Project GHG emissions fall under two "tiers" in the SCAQMD Draft GHG Guidance Document that would establish a less than significant GHG impact. First, the Project's annual GHG emissions are approximately half of the proposed threshold for commercial projects (Tier 3). Second, the Project's reduction of GHG emissions by 33 percent below regulatory requirements exceeds the Tier 4 standard to cut emissions by 30 percent from "business as usual." Although the SCAQMD Draft GHG Guidance Document has not been finalized, the Project's low GHG emissions profile and GHG reduction measures are relevant to the overall significance determination.

The Project is also consistent with the City's Green LA Plan. The Green LA Plan emphasizes improving energy conservation, enhancing energy efficiency, increasing renewable energy generation, increasing the diversion of solid waste from landfills, and changing transportation and land use patterns to reduce auto dependence. As stated above, the Project is a centrally-located development that will not increase local or regional

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[56] *Climate Change Scoping Plan, California Air Resources Board, December 2008, available at http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm.*

traffic. PDFs require the use of reclaimed water for irrigation, water conservation measures, energy reduction measures, and green waste diversion measures. With the implementation of Project Design Features, the Project is consistent with the Green LA Plan.

(4) Determination of Significance for Project GHG Emissions

The Project implements Project Design Features that reduce GHG emissions 33 percent below legal and regulatory standards. Moreover, numerous governmental policies and programs will indirectly reduce actual Project's GHG emissions even further then presented in this analysis The Project is a centrally located development meeting existing and expected demand, which supports GHG reduction goals of reducing vehicle miles traveled by encouraging infill development. The Project results in relatively minimal GHG emissions for a commercial project. The Project is consistent with AB 32, the CARB Scoping Plan, the SCAQMD Draft GHG Guidance Document, the Attorney General Fact Sheet, the 2006 Climate Action Team Report, and the Green LA Plan. Accordingly, the Project's GHG emissions represent a less than significant impact on the environment and would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

5. Mitigation Measures

As analyzed in this section, construction and operation of the Project would not have the potential to result in significant air quality impacts, and as such mitigation measures are not required.

6. Level of Significance After Mitigation

Construction and operation of the Project would result in less than significant air quality impacts with incorporation of the project design features set forth above.

IV. Environmental Impact Analysis

C. Biological Resources

1. Introduction

The purpose of this section is to characterize the biological resources that currently occur on the Project Site, identify sensitive biological resources that are known to occur or have the potential to occur on-site, assess the potential significance of impacts to these biological resources from the proposed Project, and recommend mitigation measures to avoid, minimize, or reduce the significance of any potential impacts.

The information contained in this section is summarized from the following reports below prepared by TERACOR Resource Management, which are included within Appendix C to this Draft EIR.

- *General Biological Assessment for Forest Lawn Memorial-Park,* Hollywood Hills, 19 January 2011.
- *Presence/Absence Report for the California Gnatcatcher (Polioptila californica californica) for Forest Lawn Memorial-Park, Hollywood Hills,* 24 July 2007.
- *Presence/Absence Report for Least Bell's Vireo (Vireo bellii pusillus) for Forest Lawn Memorial-Park, Hollywood Hills,* 08 December 2008.
- *Presence/Absence Report for Least Bell's Vireo (Vireo bellii pusillus) for Forest Lawn Memorial-Park, Hollywood Hills,* 06 December 2006.
- *Small Mammal Trapping Program for Forest Lawn Memorial-Park, Hollywood Hills, Within the City of Los Angeles, California,* 25 September 2008, revised 11 August 2010.
- *Rare Plant Survey and Assessment for Forest Lawn Memorial-Park, Hollywood Hills,* 31 August 2010.
- *Preliminary Determination of U.S. Army Corps of Engineers "Waters of the U.S." and Wetlands Jurisdiction and Impact Analysis, Forest Lawn Memorial-Park, Hollywood Hills,* 02 September 2010.

- *Preliminary Determination of California Department of Fish and Game "Streambeds" Jurisdiction and Impact Analysis, Forest Lawn Memorial-Park, Hollywood Hills,* 02 September 2010.

- *Forest Lawn Memorial-Park, Hollywood Hills – California Rapid Assessment Method Executive Summary,* August 2010.

- *Diurnal Raptor Surveys for Forest Lawn Memorial-Park, Hollywood Hills, Within the City of Los Angeles, California,* 11 August 2010.

- *Winter Owl Surveys for Forest Lawn Memorial-Park, Hollywood Hills, Within the City of Los Angeles, California,* 11 August 2010.

- *Addendum Biological Analysis of the Proposed Off-Site Basin Areas for the Forest Lawn Memorial-Park, Hollywood Hills Master Plan within the City of Los Angeles, California,* 31 August 2010.

- *Protected Tree Survey and Assessment and Impact Analysis for Forest Lawn Memorial-Park, Hollywood Hills,* 11 August 2010.

The potential for sensitive biological resources to occur on-site was investigated through preparation of the aforementioned reports for the Project Site and review of pertinent literature (including regional floral and faunal guides and resource agency special reports) and current database information (including the California Natural Diversity Database). A complete list of the resources consulted is included as Appendix C to the *General Biological Assessment,* attached as Appendix C-1 to this Draft EIR.

Fieldwork was conducted on foot by all site investigators, through all natural habitat areas within the Project Site. Plants, reptile and amphibian species, bird species, and mammals identified on, or which are potentially present on the Project Site are presented in Appendices A and B to the *General Biological Assessment*, attached as Appendix C-1 to this Draft EIR. Plants were identified in the field by site investigators. Reptile and amphibian species were surveyed by turning debris, and scanning sunning and foraging areas. Bird species were identified by field personnel both aurally and visually. Mammals were identified initially by sight or sign evidence. Small mammal presence and diversity was established as a result of 12 years of site review as well as by a Fall 2006 trapping program.

With regard to determining the presence of animal and plant species, the *General Biological Assessment* is, in part, habitat-based and predictive. The evaluation for presence for animal and plant species included such variables as availability of support resources (such as rock outcrops, surface water, specific host plants, nesting sites, etc.), the location and size of the Project Site, and the history of disturbance. The likelihood of

potential occurrences is further based on the known distributions of species, and their overall habitat requirements and preferences, including information from the California Natural Diversity Database (CNDDB) regarding species occurrence, population numbers, occurrence dates, and potential threats to organisms, as well as historical records of faunal species occurrence. In addition, the Project Site was evaluated to determine whether it contained features that might be considered wetlands or waters subject to federal or state jurisdiction.

2. Environmental Setting

a. Existing Regulatory Framework

The following discussion identifies federal, state and local environmental regulations and policies that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

(1) Federal

(a) Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has four major components: (1) provisions for listing species; (2) requirements for consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service; (3) prohibitions against "taking" of listed species; and (4) provisions for permits that allow an incidental "take."[1] The FESA also discusses recovery plans and the designation of critical habitat for listed species. Both the USFWS and the National Marine Fisheries Service share the responsibility for administration of the FESA. During the CEQA review process, each agency is given the opportunity to comment on the potential of a project to affect listed plants and animals.

(b) Clean Water Act Sections 404 & 401

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United

[1] *The FESA defines a "take" as follows: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to collect or attempt to engage in any such conduct." 16 U.S.C. § 1532.*

States, including wetlands, under Section 404 of the Clean Water Act.[2] "Waters of the United States"[3] include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and are determined depending on which type of waters is present.[4] Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports) and mining projects. Section 404 of the Clean Water Act requires a federal license or permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the Clean Water Act[5] requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. The certification must be obtained from the state in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The agency with jurisdiction over the Project Site is the Los Angeles Regional Water Quality Control Board.

(c) The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act[6] prohibits the taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the Act, the term "take" is defined as "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a

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[2] *33 U.S.C. § 1344.*

[3] *Title 33 C.F.R. Part 328.3(a).*

[4] *Title 33 C.F.R. Part 328.4(a), (b), & (c).*

[5] *33 U.S.C. Section 1341.*

[6] *16 U.S.C. Sections 703 et seq.; Title 50 C.F.R. Part 10.*

few exceptions, most birds are considered migratory under the Migratory Bird Treaty Act. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the Migratory Bird Treaty Act.

(2) State

(a) California Endangered Species Act

The State of California enacted laws similar to the FESA the California Native Plant Protection Act enacted in 1977 and the California Endangered Species Act (CESA) enacted in 1984. The CESA expanded upon the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of "endangered" and "threatened" species. It converted all animals previously determined "rare" by the California Fish and Game Commission into threatened species in the CESA, but did not do so for rare plants. Thus, these laws provide the legal framework for the protection of California-listed endangered, threatened, and rare plant and animal species. The California Department of Fish and Game (CDFG) implements the Native Plant Protection Act and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities, based on information submitted by agencies, researchers, and individuals. During the CEQA review process, the CDFG is given the opportunity to comment on the potential of a project to affect listed plants and animals.

(b) State Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFG's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The California Fish and Game Code sections (fish at Section 5515, amphibians and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with "fully protected" species state that these species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the California Fish and Game Code sections dealing with fully protected species were amended to allow the CDFG to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFG because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFG, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for listing under FESA and CESA, and recovery efforts that might ultimately be required. This designation is also intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

(c) California Department of Fish and Game "Special Animals"

"Special Animals" is a general term that refers to all of the taxa the CNDDB tracks, regardless of their legal or protection status. The list is also referred to as the list of "species at risk" or "special status species." CDFG considers the taxa on this list to be those of greatest conservation need. Any species included in the CNDDB is considered a "special animal," and the list includes species that lack state or federal status but have been listed by various other state or federal agencies or by various conservation organizations.

(d) California Fish and Game Code Sections 3503 & 3513

According to Section 3503 of the California Fish and Game Code it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the Migratory Bird Treaty Act, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered a "take" by the CDFG.

(e) California Native Plant Society

The California Native Plant Society (CNPS) publishes and maintains an *Inventory of Rare and Endangered Plants of California*, which includes information regarding the distribution, ecology, rarity, and legal status of over 2,000 rare plants that occur in California. The CNPS assigns plants to the following categories:

- 1A – Presumed extinct in California.
- 1B – Rare, threatened, or endangered in California and elsewhere.

- 2 – Rare, threatened, or endangered in California, but more common elsewhere.
- 3 – Plants for which more information is needed.
- 4 – Plants of limited distribution.

A threat code is assigned to each taxon as follows:

- 1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).
- .2 – Fairly endangered in California (20-80% of occurrences threatened).
- .3 – Not very endangered in California (less than 20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and are required to be analyzed under CEQA during project review.

Although plants on List 3 and 4 have little or no protection under CEQA, they are usually included in project review.[7]

(f) Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These waterbodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the Clean Water Act. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the State Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCB has the option to regulate such

[7] *According to the City of Los Angeles CEQA Thresholds Guide, List 1B and 2 plants should be fully considered during preparation of environmental documents relating to CEQA. Although many plants on Lists 3 and 4 may not be eligible for listing, CDFG recommends that List 3 and 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA. City of Los Angeles CEQA Thresholds Guide, Section C. Biological Resources, Exhibit C-7, Notes 3, 4, and 5, page C-28.*

activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

(g) California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species are subject to jurisdiction by the CDFG under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following generally requires a Section 1602 Lake and Streambed Alteration Agreement: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation".[8] In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.[9] Riparian is defined as "on, or pertaining to, the banks of a stream"; therefore, riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself."[10] Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFG.

(h) Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local conservation plans, policies or regulations. The CDFG ranks such vegetation communities as "threatened" or "very threatened" and keeps records of their occurrences in the CNDDB. Sensitive vegetation communities are also identified by the CDFG on its List of California Natural Communities Recognized by the CNDDB. Impacts to these vegetation communities and

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[8] *Title 14 C.C.R. Part 1.72.*

[9] *California Department of Fish and Game. Environmental Services Division. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code. 1994.*

[10] *Ibid.*

habitats identified in local or regional plans, policies, regulations, or by federal or state agencies must be considered and evaluated under CEQA.

(3) Local

In addition to federal and state regulations, the General Plan for the City of Los Angeles (City) defines certain goals, policies, and implementation measures protecting biological resources. The City has also adopted various codes and ordinances that provide protection to biological resources.

(a) City of Los Angeles General Plan Framework

Objective 6.1 of the Open Space and Conservation Section of the City's General Plan Framework specifies the protection of "the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region." Policy 6.1.2 requires the coordination of "City operations and development policies for the protection and conservation of open space resources, by . . . preserving habitat linkages, where feasible, to provide wildlife corridors and to protect natural animal ranges."

(b) Hollywood Community Plan

None of the policies or goals of the Hollywood Community Plan refers specifically to biological resources. Although the Community Plan addresses recreation, park, and open space opportunities and issues, these do not directly relate to sensitive biological resources as discussed in this section. For analysis of the Community Plan policies, please refer to Section IV.H, Land Use and Planning, of this Draft EIR.[11]

(c) City of Los Angeles Municipal Code – Protected Tree Ordinance

Native species of oak (*Quercus* sp., except scrub oak [Q. dumosa]), Southern California black walnut (*Juglans californica*), California bay laurel (*Umbellularia californica*) and western sycamore (*Platanus racemosa*) trees at least four inches in diameter (cumulative for multi-trunked trees) at 4.5 feet above the ground level at the base of the tree (or "diameter-at-breast height," or DBH) are considered protected trees within the City under Ordinance No. 177,404 (effective 23 April 2006). The Ordinance prohibits, without a

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[11] *The Draft Hollywood Community Plan, released on June 24, 2009 but not yet adopted, does not address biological resources.*

permit, the removal of any regulated protected tree including "acts which inflict damage upon root systems or other parts of the tree..." and requires that all regulated protected trees that are removed be replaced on at least a two-to-one basis with trees that are of a protected variety. Replacement trees must be at least 15 gallons or larger, measure one inch or more in diameter at a foot above the base, and measure at least seven feet in height from the base. The size and number of replacement trees shall approximate the value of the tree to be replaced. The City also requires that a report be prepared by a tree expert discussing the subject tree(s), their preservation, effects of proposed construction, and mitigation measures pursuant to the removal or replacement thereof. However, native trees that have been planted as part of a tree planting program are exempt from this Ordinance and are not considered protected.

(d) City of Los Angeles CEQA Thresholds Guide

The *City of Los Angeles CEQA Thresholds Guide (2006)* requires consideration of state or federal listed endangered, threatened, rare, protected, or candidate species, Species of Special Concern, and federally listed critical habitat. The *City of Los Angeles CEQA Thresholds Guide* also requires consideration of locally designated species, natural habitat and plant communities, and it identifies 159 organisms (70 animals and 89 plants) that the City considers to be locally significant. These organisms should be considered in a biological assessment so long as the City has identified the organism(s) as having the potential to occur within the same zone as a proposed project. The *City of Los Angeles CEQA Thresholds Guide* also recognizes one state CNDDB designation for rare or at-risk vegetation communities: Highest Inventory Community.

b. Existing Biological Resources of the Project Site

(1) Physical Characteristics

The approximate 444-acre Project Site is bordered by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn to the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. Surrounding land uses beyond the Los Angeles River and 134 Freeway to the north include the Disney Studios, the ABC studio office buildings, the Warner Brothers Studios lot, and single-family residential uses, which are located within the City of Burbank.

Geographically, the Project Site is approximately 0.5 mile northeast of Cahuenga Peak in the Hollywood Hills. Recent topographic mapping of the Project Site indicates that approximately 324 acres of the Project Site is relatively disturbed topographically due to previous grading and development activities. Topography on the Project Site ranges from

approximately 625 feet above mean sea level (msl) at the entrance to the Project Site to approximately 875 feet msl near the southern boundary of the Project Site.

Soils within the undeveloped areas of the Project Site, including potential jurisdictional areas (Corps, CDFG, and RWQCB) are comprised of alluvium, artificial fill, sandy gravel, sandy silt, silty clay, gravelly sand, and silty sand associations. Additionally, many of the Sennett Creek tributaries contain conglomerate and granitic cobbles and boulders. Soils throughout the upland areas of the Project Site are comprised of artificial fill, sandy gravel, gravelly sand, silty sand, and clayey sand associations, as well as bedrock soils comprised of Topanga formation and conglomerate associations, and slopewash.

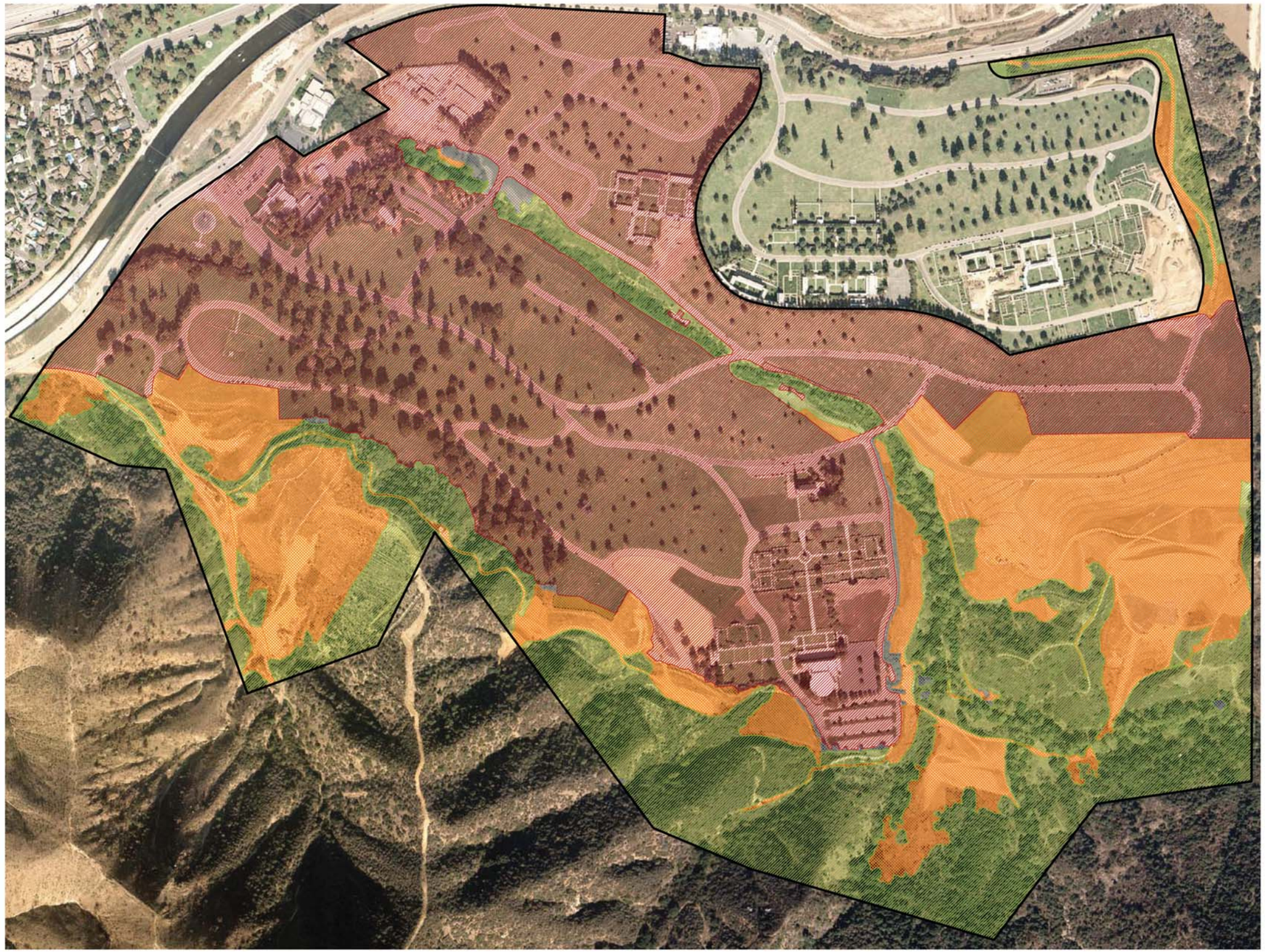
(2) Historic Conditions

Historically, the Project Site was likely comprised of the same plant community types present in natural areas on the Project Site today. These natural communities include coast live oak (*Quercus agrifolia*) woodland/forest, western sycamore/coast live oak, California walnut woodland, chaparral, and sage scrub. These are the dominant plant communities present across all of the relatively undisturbed secondary and tertiary ridgelines and canyons associated with the north slope of the Hollywood Hills.

In the mid-1940s, Forest Lawn purchased most of the Project Site for use as a cemetery. In 1948, the Los Angeles City Council issued a Conditional Use Permit (City of Los Angeles Case No. 1700) authorizing the use of the Project Site for cemetery purposes. In the decades following, Forest Lawn developed various portions of the Project Site as a cemetery. Forest Lawn removed trees and other natural plant communities, performed grading on an incremental basis as new areas of the park were developed, and installed park-like landscaping, in accordance with the Conditional Use Permit. In addition, a decomposed granite surface mine was located on approximately 45 acres of the Project Site, from approximately 1970 to the early 1990's. Surface mining was discontinued and the area was approved for cemetery use by the Los Angeles City Council in 1994 (Case No. CPC-1994-0290-CU).

(3) Current Conditions

Currently, the approximate 444-acre Project Site contains approximately 230 acres of developed memorial-park and associated support facilities, approximately 91 acres of disturbed areas (i.e., areas that have little to no vegetative cover, or contain highly disturbed vegetation not subsequently developed), approximately 3 acres of ornamental vegetation outside of the developed memorial-park, and approximately 120 acres of natural habitat (see Figure IV.C-1 on page IV.C-12, Basic Landscape Distinctions).



KEY	BASIC LANDSCAPE DISTINCTIONS	ACREAGE
	DEVELOPED MEMORIAL- PARK	229.97
	DISTURBED AREAS	90.97
	ORNAMENTAL VEGETATION	2.93
	NATURAL AREAS	119.77
TOTAL AREA FOREST LAWN MEMORIAL-PARK		**443.64**

FOREST LAWN MEMORIAL-PARK
PROPERTY LINE

GRAPHIC SCALE
600 0 300 600
(IN FEET)
1 inch = 600 ft.

Source: TERACOR Resource Management, 2010.

matrix environmental

Figure IV.C-1
Basic Landscape Distinctions

(4) Vegetation and Plant Communities

(a) Plant Communities

Fifteen (15) distinct plant communities have been identified throughout the approximately 444-acre Project Site, and are described in detail below.[12] The vegetation assemblages within the approximately 120 acres of natural, undeveloped areas within the Project Site are comprised generally of woodlands, chaparral, coastal scrub, grassland and riparian scrub communities. The balance of the Project Site consists of developed memorial-park (approximately 230 acres), disturbed areas near to and sometimes within natural areas (approximately 91 acres), and stands of ornamental vegetation adjacent to and within natural areas (approximately 3 acres) (see Figure IV.C-2 on page IV.C-14, Vegetation Communities).

The scrub, grassland, and woodland and forest communities described below comprise the approximately 120 acres of natural habitat on the Project Site.

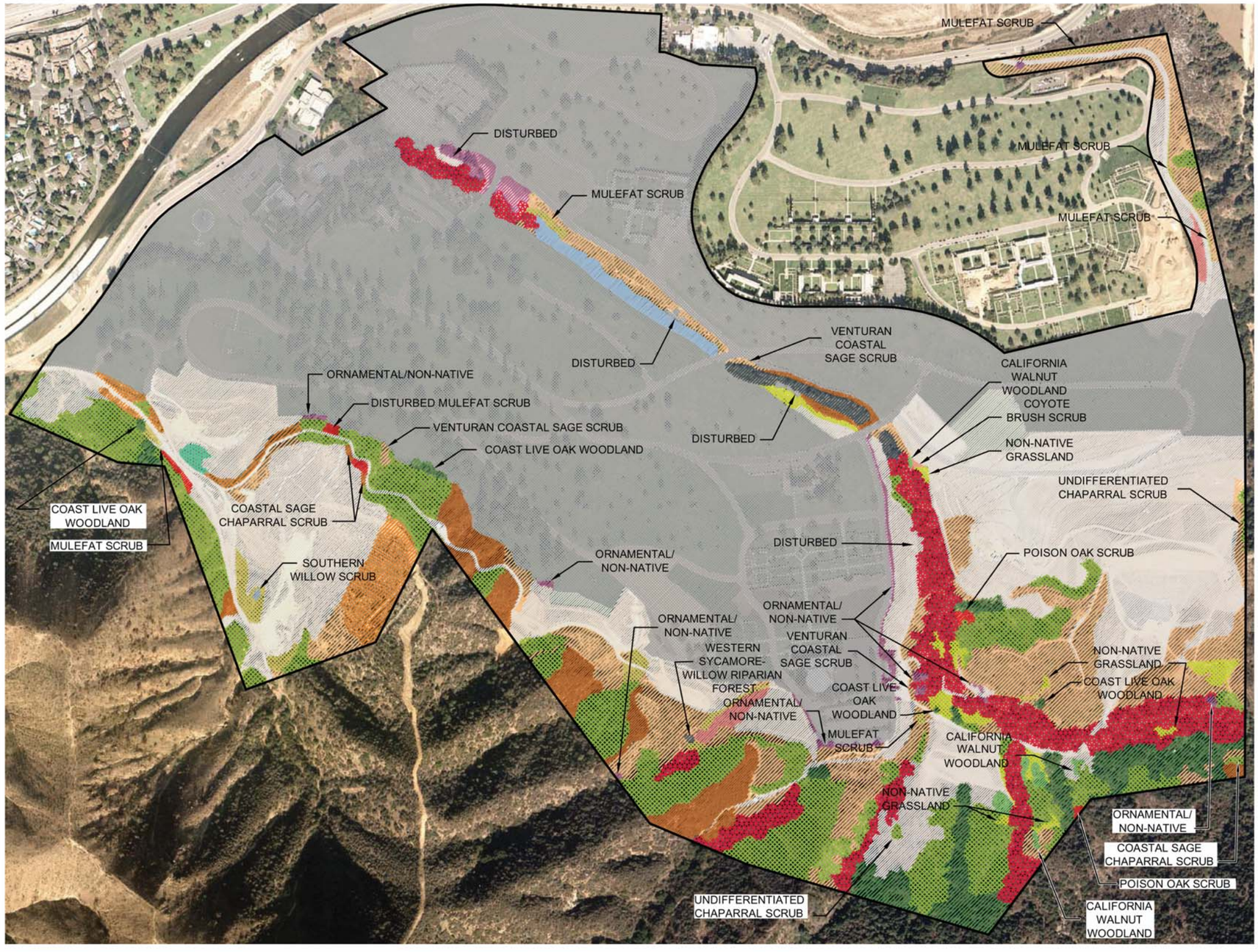
(i) Scrub Communities

Undifferentiated Chaparral Scrub

This chaparral subtype is located throughout the natural areas of the Project Site. The dominant species include: black sage (*Salvia mellifera*), chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), and greenbark ceanothus (*Ceanothus spinosus*). Undifferentiated chaparral scrub, which is the dominant vegetation community within the Project Site, is well-adapted to frequent burns due to the ability of many dominant shrubs to stump sprout. Mature stands are dense and interwoven, reducing the understory component, and making physical access difficult. Undifferentiated chaparral scrub is often found on shallow, dry soils at low elevations on xeric (dry habitat) slopes and ridges. Undifferentiated chaparral scrub totals approximately 34 acres of the Project Site.

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[12] *Classification of plant communities on the Project Site generally follows the CNDDB's List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. Vegetation community and plant names, associations, and descriptions are derived from The Jepson Manual, Higher Plants of California (Hickman 1993), Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), the CDFG's List of Terrestrial Natural Communities (2003), A Manual of California Vegetation (Sawyer and Keeler-Wolf 1995), and Wildflowers of the Santa Monica Mountains (McAuley 1996).*



KEY	VEGETATION COMMUNITY	ACREAGE
	SCRUB COMMUNITIES	
	COASTAL SAGE CHAPARRAL SCRUB	8.75
	VENTURAN COASTAL SAGE SCRUB	31.99
	COYOTE BRUSH SCRUB	1.21
	MULEFAT SCRUB	2.62
	DISTURBED VENTURAN COASTAL SAGE SCRUB	4.98
	DISTURBED MULEFAT SCRUB	0.41
	POISON OAK SCRUB	0.20
	SOUTHERN WILLOW SCRUB	1.86
	UNDIFFERENTIATED CHAPARRAL SCRUB	33.75
	SOUTHERN WILLOW SCRUB/MULEFAT SCRUB	0.39
	GRASSLAND COMMUNITIES	
	NON-NATIVE GRASSLAND	2.65
	WOODLAND/FOREST COMMUNITIES	
	COAST LIVE OAK WOODLAND	9.71
	WESTERN SYCAMORE-COAST LIVE OAK	18.86
	WESTERN SYCAMORE-WILLOW RIPARIAN FOREST	1.75
	CALIFORNIA WALNUT WOODLAND	0.64
	DEVELOPED/DISTURBED AREAS	
	DISTURBED	90.97
	EXISTING MEMORIAL PARK/FACILTIES	229.97
	ORNAMENTAL/NON-NATIVE	2.93
TOTAL AREA FOREST LAWN MEMORIAL PARK		**443.64**

FOREST LAWN MEMORIAL-PARK PROPERTY LINE

GRAPHIC SCALE

600 0 300 600

(IN FEET)

1 inch = 600 ft.

Source: TERACOR Resource Management, 2010.

matrix environmental

Figure IV.C-2
Vegetation Communities

Venturan Coastal Sage Scrub

Venturan coastal sage scrub is the second-most dominant native vegetation community within the Project Site. Dominant characteristic species for sage scrub assemblages on the Project Site include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), black sage, laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), and deerweed (*Lotus scoparius*). Venturan coastal sage scrub encompasses approximately 32 acres of the Project Site.

Coastal Sage Chaparral Scrub

Coastal sage chaparral scrub is considered an ecotonal community type between coastal sage scrub and chaparral because it contains elements of both community types. Coastal sage chaparral scrub is a mix of woody chaparral and coastal sage scrub species, and is most likely a post-fire successional community. It can also, however, occur when there are abrupt changes in soil depth and moisture due to geologic conditions below the soil profile. Species observed on the Project Site within this community included chamise, California buckwheat, California sagebrush, toyon, greenbark ceanothus, and black sage. This community comprises approximately nine acres of the Project Site.

Disturbed Venturan Coastal Sage Scrub

Disturbed Venturan coastal sage scrub is limited to the western portion of the Project Site, and is comprised of the same vegetative species described above in the Venturan coastal sage scrub description. Disturbed Venturan coastal sage scrub, which totals approximately five acres, is compositionally or structurally similar to the Venturan coastal sage scrub vegetation community described above but is located in areas which are routinely maintained, mowed, or which have been historically disturbed within the Project Site.

Mulefat Scrub

Mulefat scrub is dominated by the most common component of riparian scrub assemblages: mulefat (*Baccharis salicifolia*). This woody, evergreen plant is associated with seasonally wet soils and high energy or disturbed stream systems. This plant assemblage is characterized by having a continuous canopy comprised of shrubs less than 4 meters in height associated with sparse ground cover. It occurs in several of the basins and drainages on the Project Site, and comprises approximately three acres.

Southern Willow Scrub

Southern willow scrub is restricted to the lower end of Sennett Creek within an on-site restoration area and a basin located in the southwest portion of the Project Site. The

dominant species observed within these areas were red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), and narrow-leaved willow (*Salix exigua*). Other species recorded within this community type were mulefat and Fremont cottonwood (*Populus fremontii*). Southern willow scrub is becoming increasingly uncommon on a regional basis and is in decline due to historic agricultural conversions, urban development pressures, and arrested successional stages of vegetative development in managed riverine systems. This community comprises approximately two acres of the Project Site.

Coyote Brush Scrub

Coyote brush scrub consists of one primary species: coyote brush (*Baccharis pilularis*). This community is present in the northeastern and southern portions of the Project Site, in two distinct cells associated with intermittent water availability. Coyote brush scrub is often found on moist slopes, disturbed areas, and terraces. This community comprises approximately one acre of the Project Site.

Disturbed Mulefat Scrub

Disturbed mulefat scrub is dominated by mulefat and is compositionally or structurally similar to mulefat scrub as described above, with the same characteristics as the mulefat scrub vegetation community; however, this community is located within three disturbed areas generally comprised of asphalt/gravel roads in the western portion of the Project Site. Disturbed mulefat scrub comprises approximately 0.4 acre of the Project Site.

Southern Willow Scrub/Mulefat Scrub

Southern willow scrub/mulefat scrub is not recognized as an official community type in CDFG's List of Native Plant Communities. This designation is used when willows (*Salix* spp.) and mulefat are equally represented (co-dominant). This community type is only associated with one basin in the western portion of the Project Site. Southern willow scrub/mulefat scrub comprises approximately 0.4 acre of the Project Site.

Poison Oak Scrub

This sub-community type consists almost entirely of poison oak (*Toxicodendron diversilobum*). Although poison oak is present throughout the natural areas of the Project Site, dense, monotypic stands of poison oak scrub are limited to two isolated cells in the southeastern portion of the Project Site and two cells in the southwestern portion of the Project Site. Poison oak scrub comprises approximately 0.2 acre of the Project Site.

(ii) Grassland Communities

Non-native grassland is the only discernable grassland community on the Project Site. Native grasses do occur, such as giant wild rye (*Leymus condensatus*) and purple needle grass (*Nassella pulchra*). However, the native grasses occur in patches too small to map. Giant wild rye is associated with seeps (highly localized surface areas where subsurface water saturates the ground seasonally and sometimes exudes minor surface flows or springs, usually very short in geographic extent and duration) at the base of slopes in the southern portion of the Project Site. Purple needle grass occurs variously in both chaparral and upland scrub communities, but not in substantial densities or specific geographic locations.

Non-native grassland on the Project Site is primarily comprised of brome (*Bromus* spp.), barley (*Hordeum murinum*), Mediterranean schismus (*Schismus barbatus*), filaree (*Erodium* spp.), mustard (Brassica spp. and Hirschfeldia spp.), and Italian thistle (*Carduus pycnocephalus*). A number of native herbaceous species are commonly associated with non-native grassland and were also recorded during field surveys, such as fiddleneck (*Amsinckia* spp.), blue-eyed grass (*Sisyrinchium bellum*), cryptantha (*Cryptantha microstachys*), telegraph weed (*Heterotheca grandiflora*), and ragweed (*Ambrosia* spp.). This community comprises approximately three acres of the Project Site.

(iii) Woodland and Forest Communities

Western Sycamore/Coast Live Oak

The western sycamore/coast live oak vegetation community is the dominant community within the upper reaches of Sennett Creek and three tributaries, (Drainages D, F, and H), on the Project Site (see Figure IV.C-2, Vegetation Communities and also Figure II-6, Conceptual Site Plan for Currently Undeveloped Areas, in the Project Description of this Draft EIR). This community is a matrix of western sycamore and coast live oak. Other species present within this community within Sennett Creek are arroyo willow, narrow-leaved willow, red willow, Southern California black walnut, and mulefat. Tributaries D, F, and H's understories were typically comprised of more upland species such as toyon and California buckwheat. This community is typically found in riparian areas, such as springs or river banks. It comprises approximately 19 acres of the Project Site.

Coast Live Oak Woodland

Coast live oak woodland is located throughout the natural areas of the Project Site. This vegetation community type is dominated by one tree species, coast live oak, and is comprised mainly of mature trees. This community comprises approximately ten acres of the Project Site.

Western Sycamore/Willow Riparian Forest

The western sycamore woodland/willow riparian forest vegetation community is the dominant community present within the Sennett Creek restoration zone between Memorial Drive and Magnolia Avenue. This mixed community is also located within the upper end of the Sennett Creek restoration area near Magnolia Avenue. The dominant species is western sycamore. The understory of this vegetation community includes species such as arroyo willow, red willow, and mulefat. This community is generally limited to riparian areas, such as springs or river banks. It comprises approximately two acres of the Project Site.

California Walnut Woodland

California walnut woodland is generally found on relatively moist, fine-textured soils of valley slopes and bottoms. California walnut woodland is generally characterized by open tree canopies and a strong association with grassy understories. On the Project Site, the majority of the understories are comprised of non-native grassland. These California walnut woodland cells were likely a blended Southern California black walnut and coast live oak association. This community comprises approximately 0.6 acre of the Project Site.

California walnut woodland does not occur on the Project Site naturally. Rather, it is an "artifact" or "relic" of previous development-related activities on the Project Site, including the loss of oak trees over time. Southern California black walnut is a recognized component of coast live oak woodland; that is, it occurs occasionally within oak woodland. Only when it is the dominant tree would it be recognized as a separate community. There are several mappable cells of this human-affected woodland community type.

(iv) Developed/Disturbed/Ornamental Areas

Developed Areas

The existing memorial-park and developed areas (i.e., improved with concrete or asphalt, or covered with turf and being used for interment spaces) comprise approximately 230 acres of the Project Site.

Disturbed Areas

Areas that have little to no vegetative cover, or are comprised of highly disturbed vegetation and not subsequently developed, are designated disturbed. These areas are generally confined to relatively recently graded areas, maintained areas, and unimproved roads, as shown on Figure IV.C-1, Basic Landscape Distinctions. Plant species in disturbed areas primarily consist of mustards, Italian thistle, and bull thistle (*Cirsium vulgare*). The Project Site includes approximately 91 acres of disturbed areas.

Ornamental Areas

Although the majority of the areas in the memorial-park that are classified as developed are comprised of ornamental vegetation (e.g., turf, pine trees, iceplant, and oleander), areas in which ornamental species either bordered and/or encroached into the natural areas of the Project Site were labeled as ornamental areas. Ornamental vegetative species comprise approximately three acres of the undeveloped areas of the Project Site.

(5) Wildlife

The majority of the Project Site is developed or disturbed, as noted above, due to a long history of development since the cemetery use was first approved in 1948. Disturbed/developed areas are generally considered to be of low habitat value to wildlife, though the developed/cemetery portion of the Project Site is a relatively benign use adjacent to natural areas, especially when compared to residential areas. Because of the nature of the cemetery land use, typical negative effects on wildlife often associated with adjacent residential developments (e.g., dogs, cats, and neighborhood children) are not generated by the use. A number of common, urban-adapted species can be found on the Project Site including Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), black-chinned hummingbird (*Archilochus alexandri*), house finch (*Carpodacus mexicanus*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), Virginia opossum (*Didelphis virginiensis*), northern raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), and coyote (*Canis latrans*). These animals will often utilize lawn and disturbed areas, particularly when they are adjacent to natural areas. The developed memorial-park contains low levels of evening light, closes at night, and provides urban-tolerant species with foraging area.

As discussed above, approximately 120 acres of the Project Site (primarily the southernmost portion) have not been substantially altered by development and still contain relatively natural habitat. These areas are considered to have a moderate to high value to wildlife. For example, intact oak/sycamore woodland habitats provide nesting sites to several species of birds such as great horned owl (*Bubo virginiensis*), red-tailed hawk (*Buteo jamaicensis*), house wren (*Troglodytes aedon*), Pacific-slope flycatcher (*Empidonax difficilis*), and oak titmouse (*Baeolophus inornatus*).

Natural intact habitats within the Project Site serve as a stopover, resting, and foraging area for migratory birds moving along the Pacific Flyway. During the course of several bird surveys since 1997, a total of 85 avian species have been detected which utilize habitats on the Project Site either year-round or seasonally. These species include phainopepla (*Phainopepla nitens*), yellow warbler (*Dendroica petechia*), black-throated gray warbler (*Dendroica nigrescens*), Nashville warbler (*Vermivora ruficapilla*), and sharp-shinned hawk (*Accipiter striatus*) during fall and spring migration.

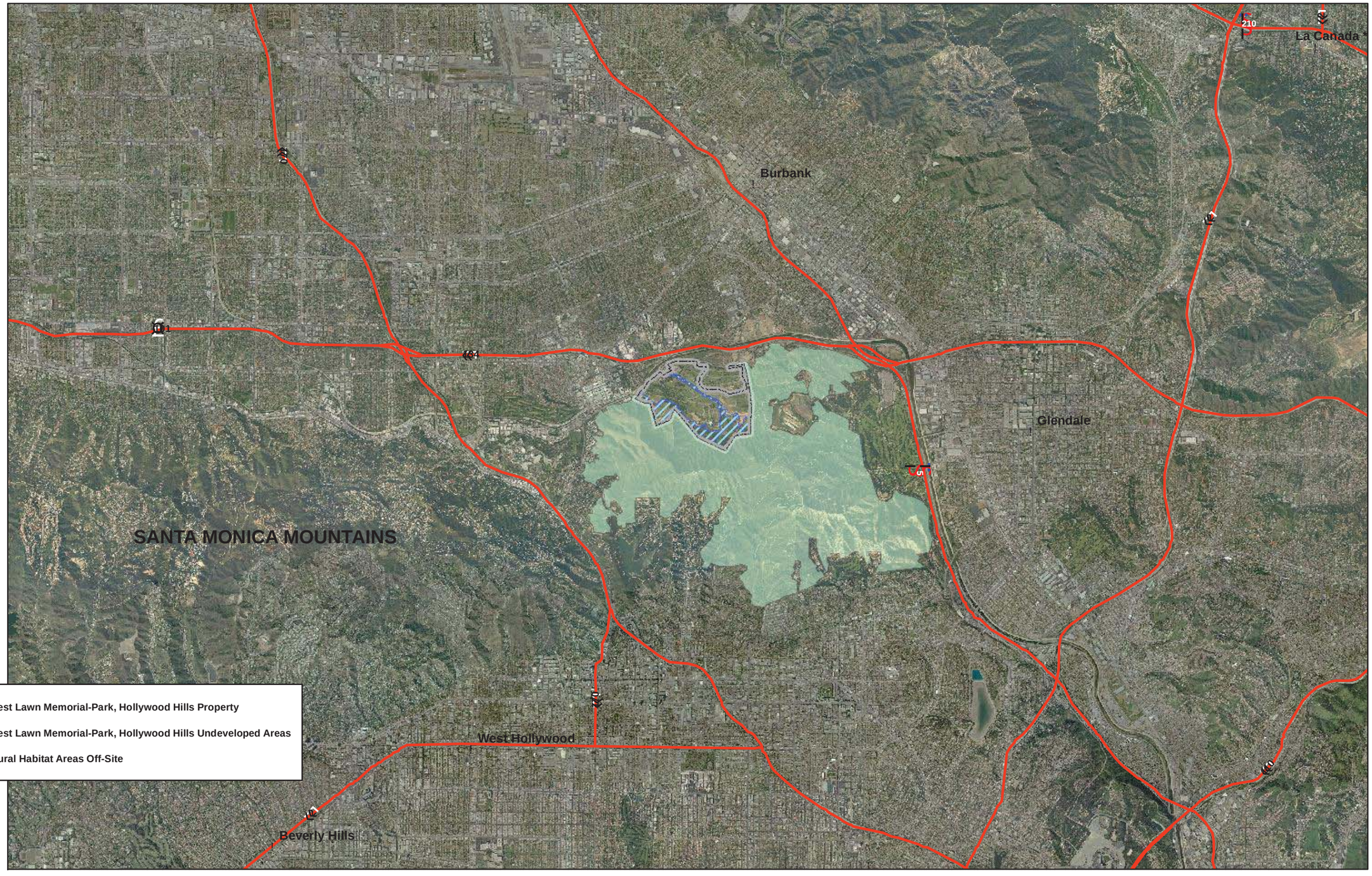
Appendix B to the *General Biological Assessment*, attached as Appendix C-1 to this Draft EIR, records those species observed and those which have the potential to occur on the Project Site.

(6) Wildlife Movement

Much of the area around the Project Site is urbanized, characterized by buildings and ornamental landscape. There is, however, an "island" of natural open space, containing a range of habitats and relatively undisturbed to moderately disturbed natural areas, surrounded by the developed urban area. The size of the entire habitat "island" south of State Highway 134, east of Barham Boulevard, west of Interstate 5, and north of the southern boundary of Griffith Park, which includes Griffith Park natural areas, undeveloped areas of the Project Site, and other privately owned properties in the Cahuenga Peak/Mt. Lee area, is approximately 3,600 acres. The 120 acres of natural habitat on the Project Site comprise a small fraction of that total, approximately 3 percent of the total natural area. This relatively small area would support a proportionally small amount of wildlife movement (see Figure IV.C-3 on page IV.C-21, Biogeographic Aerial Photograph).

The south slope of the Hollywood Hills (facing Hollywood) is relatively dry and supports less dense vegetation than the north slope. Hence, south-facing slopes may provide foraging and movement pathways for organisms that prefer open, less dense habitats (sage scrub). These animals include coast horned lizard (*Phrynosoma blainvillii*), several species of white-footed mice (*Peromyscus* spp.) and pocket mice (Chaetodipus spp.), and other scrub-dwelling organisms. The north slope (facing the San Fernando Valley), on which the Project Site is located, supports more chaparral and oak woodland habitats. Organisms associated with stream, tree and chaparral communities include woodrats, flycatchers, woodpeckers, frogs, and warblers. Habitat generalists such as mule deer and coyote, move freely between all these community types.

Sennett Creek originally was comprised of oak/sycamore dominated riparian woodland that stretched from the Los Angeles River upward into what is now called Royce's Canyon in Griffith Park. Prior to 1940, Sennett Creek was one of many ecologically functional tributaries to the Los Angeles River. With the channelization of the Los Angeles River, Sennett Creek has been truncated. Portions of the creek have been affected by historic development of the Project Site as well; however, those previously affected sections have been largely restored and are now comprised of mixed willow riparian scrub intermixed with newly established sycamores, cottonwoods, and coast live oaks.



Source: TERACOR Resource Management, 2010.

matrix environmental

Figure IV.C-3
Biogeographic Aerial Photograph

Currently, Sennett Creek provides habitat and cover for riparian-dwelling and stream-dependent organisms, but it has no direct ecological connection with the Los Angeles River, as it once did. As such, it provides a water source and a movement area for animals like mule deer, long-tailed weasel (Mustela frenata), bobcat (Lynx rufus) and northern raccoon; however, its functions with regard to connectivity into greater Los Angeles River-associated habitats have been largely eliminated due to the current condition of the River and the extensive conversion of habitats throughout the San Fernando Valley. Moreover, regulatory status organisms13 that once might have used the river to access other tributary stream systems (such as anadromous fish species, California red-legged frog [Rana draytonii], and regulatory status small mammals like Los Angeles pocket mouse [Perognathus longimembris brevinasus] and perhaps kangaroo rats [Dipodomys spp.]) now are in decline or absent. Therefore, while organisms now present in the area most likely do venture into Sennett Creek for water and for cover, they do not do so in a manner consistent with the actual role of wildlife corridors.

Currently, the Project Site is fenced along Forest Lawn Drive (i.e., the north property boundary), along the eastern boundary with Griffith Park, and along a portion of the southern boundary with Griffith Park. The fence along the southern boundary of the Project Site extends from the southeast corner of the Project Site to the area near Drainages E and F in the central portion of the Project Site. Other areas of the Project Site adjacent to undeveloped areas are otherwise maintained in their natural state. Where fencing is placed along the property line, it tends to be porous in terms of wildlife movement, and birds, small mammals, snakes, lizards, and invertebrates generally would not experience any barriers as a result of the existing fencing.

(7) Griffith Park Significant Ecological Area (SEA)

The Griffith Park Significant Ecological Area (SEA) was designated by the County of Los Angeles in 1976. It was described at the time as important by virtue of its geographic location and as an island of natural vegetation surrounded by urban and suburban development. The Project Site lies almost entirely outside of the Griffith Park SEA. The southwestern corner of the Project Site appears to be in the SEA[14]. The SEA does not include the developed portion of the Project Site, but does include approximately 40 to 45 acres (less than 10 percent) of the Project Site that were previously utilized for surface

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[13] *"Regulatory Status" refers to those species that appear on a federal, state, or local list identified in the City of Los Angeles CEQA Thresholds Guide.*

[14] *Due to the generality of SEA mapping techniques and the scale at which the SEA boundary is depicted, it is difficult to determine the precise boundary of the SEA.*

mining activities. Additionally, the adjacent undeveloped property owned by Forest Lawn to the west of the developed memorial-park also appears to be within the SEA boundaries.

(8) Regulatory Status and Protected Organisms

(a) Regulatory Status Natural Communities

Natural communities present on the Project Site that either appear in the *City of Los Angeles CEQA Thresholds Guide's* list of "Highest Inventory Communities" or are designated by the CDFG as a "Special Community" are as follows: western sycamore/coast live oak, coast live oak woodland, southern willow scrub, western sycamore woodland/willow riparian forest, California walnut woodland, and southern willow scrub/mulefat scrub.[15] No other regulatory status natural communities that are known from the region were determined to be present on-site.

(b) Regulatory Status Animal Species

Based on the data compilation, background research, and site surveys, 13 regulatory status wildlife species were confirmed present, or determined to have a moderate or high potential presence, on the Project Site.[16] These include four reptile species (California mountain kingsnake, coast horned lizard, coast patchnose snake, and California legless lizard), three bird species (Cooper's hawk [for nesting], yellow warbler [for nesting], and Southern California rufous-crowned sparrow), and six mammalian species (San Diego desert woodrat, ringtail (also referred to as "ringtail cat"), western red bat, pallid bat, spotted bat, and western mastiff bat). The evaluation for presence of regulatory status organisms included such variables as availability of support resources (such as rock outcrops, surface water, specific host plants, and nesting sites), the location and size of the Project Site, and the history of disturbance. The likelihood of potential occurrences is further predicated on the known distribution of species and their overall habitat requirements and preferences. All of the wildlife species evaluated herein are presented and evaluated in detail in the *General Biological Assessment*, attached as Appendix C-1 to this Draft EIR.

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[15] *While western sycamore/coast live oak, coast live oak woodland, and western sycamore woodland/willow riparian forest are not specifically designated by the City of Los Angeles CEQA Thresholds Guide, they are analogous to natural communities that are specifically designated by the City of Los Angeles CEQA Thresholds Guide. Accordingly, they are considered "regulatory status" for purposes of this analysis.*

[16] *Confirmed or potentially present species designated as "Special Animals" by CDFG, which do not have regulatory status under the City of Los Angeles CEQA Thresholds Guide, are presented as Appendix E to the* General *Biological Assessment, attached as Appendix C-1 to this Draft EIR.*

(c) Regulatory Status Plants

Four regulatory status plant species have been detected within the Project Site: Catalina mariposa lily (*Calochortus catalinae*), Coulter's matilija poppy (*Romneya coulteri*) (determined to be a cultivar and not relevant to the rare plant survey effort), ocellated Humboldt lily (*Lilium humboldtii ocellatum*), and Southern California black walnut. All three relevant regulatory status plant species have a List 4.2 designation by the CNPS, which means that they are on a watch list of plants of limited distribution in California. These plants are also locally designated by the City CEQA Thresholds Guide. None of these plant species has a federal listing status. A table presenting all of the regulatory status plant species considered and evaluated for potential to occur on-site based on the data compilation and background research, as well as focused field investigations, is included as Table 3 in the *General Biological Assessment*, attached as Appendix C-1 to this Draft EIR. For additional detail, see *Rare Plant Survey and Assessment for Forest Lawn Memorial-Park, Hollywood Hills*, attached within Appendix C to this Draft EIR.

(d) Protected Trees

All trees within the Project Site that are protected under the LAMC have been identified, inventoried, evaluated and mapped. Currently, there are a total of 1,425 protected trees within the Project Site: 1,007 coast live oaks, 220 western sycamores,[17] and 198 Southern California black walnuts. Of the 1,007 coast live oaks present on the Project Site, 734 are located within CDFG jurisdictional areas and 273 are located within upland areas. All 220 western sycamores present on the Project Site are located within CDFG jurisdictional areas. Of the 198 Southern California black walnuts on the Project Site, 101 are located within CDFG jurisdictional areas and 97 are located within upland areas.

Eight hundred thirty-five (835) protected trees, including 632 coast live oaks, 59 western sycamores, and 144 Southern California black walnuts, would likely be removed with implementation of the proposed Project. For additional detail regarding protected trees on the Project Site, see *Protected Tree Survey and Assessment and Impact Analysis for Forest Lawn Memorial-Park, Hollywood Hills*, attached within Appendix C to this Draft EIR.

[17] *The City's Protected Tree Ordinance refers to "western sycamores," which are also known as "California sycamores." For purposes of this section, such trees will be referred to as western sycamores.*

(9) Hydrological Features

All drainages and other potentially jurisdictional features present on the Project Site were investigated. The Project Site is bisected by Sennett Creek, an intermittent USGS-designated blueline stream. The Sennett Creek watershed is relatively large (approximately 704 acres) and includes much of the Project Site and Griffith Park, extending south to the ridgeline complex defined by the north sides of Mount Lee, Cahuenga Peak, and Mount Hollywood. There are 17 tributaries to Sennett Creek within the Project Site. All drainages on-site, with the exception of Drainage L at the west property line, convey flows into Sennett Creek. Several drainages convey flows through existing stormwater basins. Sennett Creek and Drainage L convey flows directly into the Los Angeles River Flood Control Channel.

Most of the identified drainages on the Project Site consist of a primary drainage and several subordinate or tributary drainages. The primary drainage is indicated by a single letter (e.g. "A" or "L"). Sennett Creek, which is also referred to as Drainage A, is the primary drainage on the Project Site. As noted above, there are 17 tributaries to Sennett Creek within the Project Site. The Project Site and areas above and surrounding the Project Site also contain eight tributaries to Drainage L. There are also ten basins on the Project Site, including two associated with Sennett Creek and eight associated with Drainage L.

A total of 6.65 acres of potential Corps jurisdictional "Waters of the U.S." ("waters"), which includes 2.90 acres of non-wetland "waters" and 3.75 acres of wetland "waters" are present on the Project Site within the drainages and basins on the Project Site described above. A total of 17.43 acres of potential CDFG jurisdictional "streambeds" (which encompasses the 6.65 acres of potential Corps jurisdictional "waters") are present on the Project Site within the drainages and basins on the Project Site described above. For additional detail, see *Preliminary Determination of U.S. Army Corps of Engineers "Waters of the U.S." and Wetlands Jurisdiction and Impact Analysis,* Forest Lawn Memorial-Park, Hollywood Hills, and *Preliminary Determination of California Department of Fish and Game "Streambeds" Jurisdiction and Impact Analysis, Forest Lawn Memorial-Park, Hollywood Hills*, attached within Appendix C to this Draft EIR.

Periodic maintenance activities within Sennett Creek and existing debris basins (i.e., to thin dense vegetation and remove accumulated biomass such as downed trees and trash and similar debris) have occurred in order to maintain storm flow capacity. Vegetation removal or thinning within designated clearance areas is generally conducted outside of the bird nesting season and under the direction of a biological monitor.

3. Environmental Impacts

a. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to biological resources. These questions are as follows:

Would the project:

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

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

- Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* includes specific thresholds for determining whether a project would normally have a significant impact on biological resources. Specifically, significant biological resources impacts would normally result if implementation of a project could result in:

- The loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat;

- The loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community;
- Interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species;
- The alteration of an existing wetland habitat; or
- Interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

b. Analysis of Project Impacts

The proposed Project would has the potential to result in impacts that include direct effects to on-site biological resources in the following resource categories: (1) vegetation communities; (2) regulatory status animals species; (3) regulatory status plant species; (4) protected trees; and (5) jurisdictional "waters of the U.S." and CDFG jurisdictional streambeds. These potential impacts are discussed below.

(1) Potential Vegetation Community Impacts

The natural vegetation communities on the Project Site, their respective acreages on-site, impacted acreages, and regulatory status community designation (if applicable) are presented below in Table IV.C-1 on page IV.C-28. Table IV.C-1 demonstrates that 70.42 acres of the approximately 120 acres of natural vegetation communities on the Project Site would be impacted with implementation of the proposed Project (see Figure IV.C-4 on page IV.C-30, Affected Vegetation Communities). Organisms with at least a moderate potential to occur may be present in these habitats, as specifically analyzed below on a species by species basis in Table IV.C-2 on page IV.C-31, Regulatory Status Animal Species and Habitats.

Each of the 15 natural plant communities on the Project Site would be affected to some extent by the proposed Project. Six of the 15 vegetation communities are locally designated regulatory status communities (or their functional equivalents), and the effects to those communities are described below.

Of the approximately 120 acres of native vegetation communities present on the Project Site, approximately 18.02 acres of vegetation communities locally designated as a Highest Inventory Community by the *City of Los Angeles CEQA Thresholds Guide* and/or identified as a CDFG Special Community (or the functional equivalent thereof) would be permanently impacted by the implementation of the proposed Project, including approximately 9.27 acres of western sycamore/coast live oak, approximately 7.64 acres of

Table IV.C-1
Vegetation Communities on the Project Site

Natural Vegetation Community	Acreage On-Site	Acreage Impacted	Regulatory Status Community Designation
Undifferentiated chaparral scrub	33.75	18.05	None
Venturan coastal sage scrub	31.99	21.81	None [a]
Coastal sage chaparral scrub	8.75	3.21	None
Disturbed Venturan coastal sage scrub	4.98	4.31	None [a]
Mulefat scrub	2.62	1.92	None
Southern willow scrub	1.86	0.05	City Highest Inventory Community CDFG Special Community [b]
Coyote brush scrub	1.21	0.73	None
Disturbed mulefat scrub	0.41	0.3	None
Southern willow scrub/mulefat scrub	0.39	0.39	City Highest Inventory Community (Southern willow scrub) CDFG Special Community (Southern willow scrub) [b]
Poison oak scrub	0.2	0.17	None
Non-native grassland	2.65	1.9	None
Western sycamore - coast live oak	18.86	9.27	Potentially functionally analogous to either Southern mixed riparian forest or Southern coast live oak riparian forest (both City Highest Inventory Communities) CDFG Special Community (western sycamore and Southern coast live oak riparian forest)
Coast live oak woodland	9.71	7.64	Potentially functionally analogous to Southern coast live oak riparian forest (City Highest Inventory Community)
Western sycamore/willow riparian forest	1.75	0.05	Potentially functionally analogous to either Southern mixed riparian forest or Southern cottonwood willow riparian forest (both City Highest Inventory Communities) CDFG Special Community (Western sycamore)
California walnut woodland	0.64	0.62	City Highest Inventory Community CDFG Special Community [b]
Total	119.77	70.42	N/A
Total Regulatory Status Communities [c]	33.21	18.02	N/A

Table IV.C-1 (Continued)
Vegetation Communities on the Project Site

Natural Vegetation Community	Acreage On-Site	Acreage Impacted	Regulatory Status Community Designation

[a] *Although not designated as a City Highest Inventory Community or CDFG Special Community, Venturan coastal sage scrub has been recognized by CDFG as a top priority rare natural community in Southern California that, according to February 1992 sensitivity rankings, occurs in 6-20 known locations and/or has 2,000-10,000 acres of habitat remaining with a "threatened" degree of threat.*

[b] *Southern willow scrub and California walnut woodland have each also been recognized by CDFG as a top priority rare natural community in Southern California that, according to February 1992 sensitivity rankings, occurs in 6-20 known locations and/or has 2,000-10,000 acres of habitat remaining with a "threatened" degree of threat.*

[c] *These regulatory status communities are an acreage sub-set of the total approximately 120 acres of natural vegetation communities on-site.*

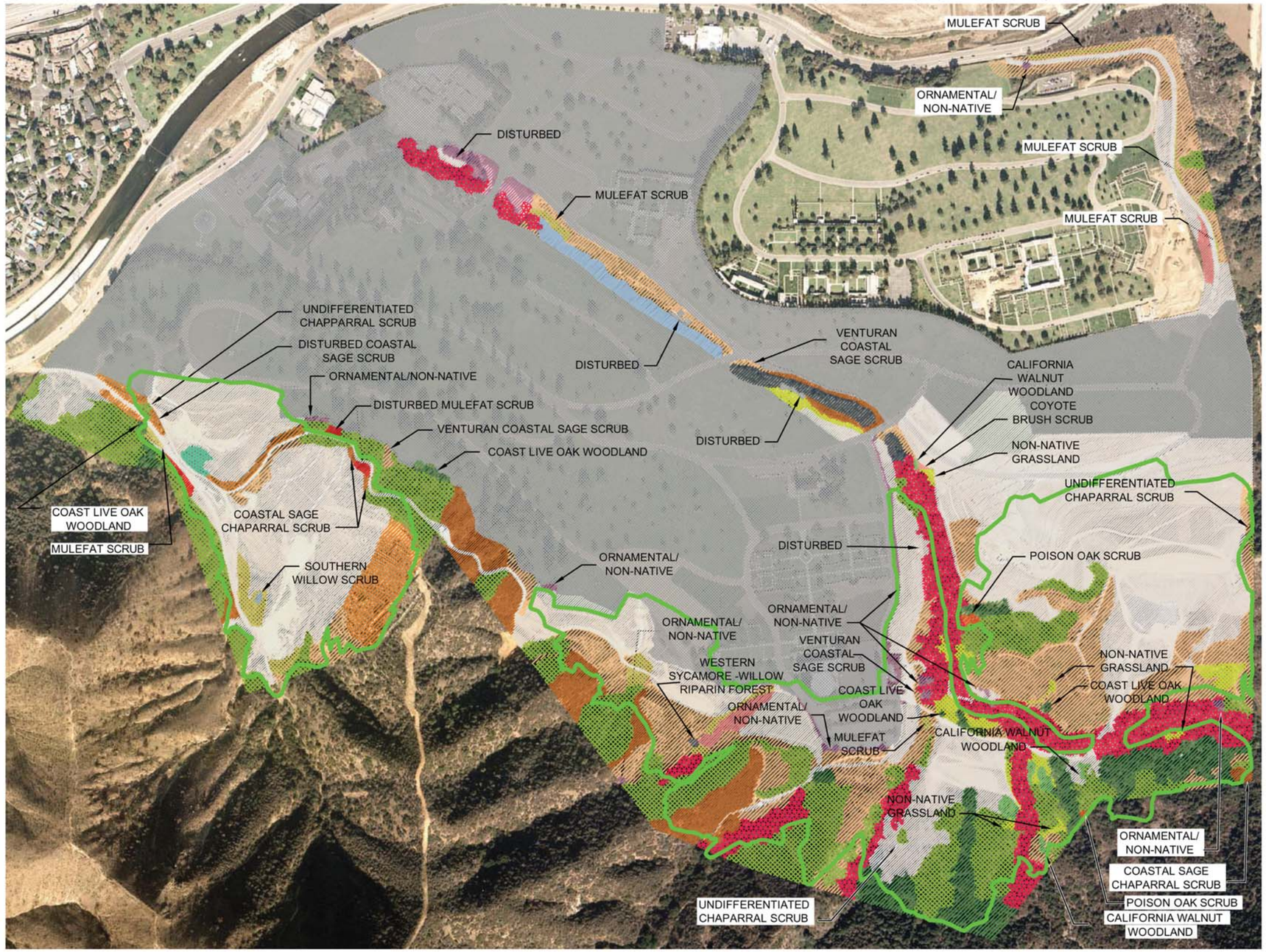
Source: TERACOR Resource Management, 2010.

coast live oak woodland, approximately 0.62 acre of California walnut woodland, approximately 0.39 acre of southern willow scrub/mulefat scrub, approximately 0.05 acre of southern willow scrub, and approximately 0.05 acre of western sycamore/willow riparian forest. The loss of these regulatory status vegetation communities would be considered potentially significant prior to mitigation. As discussed below, implementation of the proposed mitigation program below, including Mitigation Measures C-1 through C-6, Mitigation Measure C-8 and Mitigation Measures C-15 through C-17, would reduce the impact to these regulatory status vegetation communities to a less than significant level.

With respect to vegetation communities that are not considered regulatory status, the proposed Project would impact the following: approximately 21.81 acres of Venturan coastal sage scrub, approximately 18.05 acres of undifferentiated chaparral scrub, approximately 4.31 acres of disturbed Venturan coastal sage scrub, approximately 3.21 acres of coastal sage chaparral scrub, approximately 1.92 acres of mulefat scrub, approximately 1.9 acre of non-native grassland, approximately 0.73 acre of coyote brush scrub, approximately 0.3 acre of disturbed mulefat scrub, and approximately 0.17 acre of poison oak scrub. The loss of these non-regulatory status vegetation communities would be a less than significant impact.

(2) Potential Regulatory Status Animal Species Impacts

To the extent animal species utilize the 70.42 acres of habitat that could be removed with Project implementation, these animals would have the potential to be impacted either directly or indirectly. Direct impacts to animal species could occur through incidental death during tree and brush removal operations. Indirect impacts would be expected to occur with Project implementation through habitat loss and associated stresses related to



KEY	VEGETATION COMMUNITY	ACREAGE IMPACTED
SCRUB COMMUNITIES		
	COASTAL SAGE CHAPARRAL SCRUB	3.21
	VENTURAN COASTAL SAGE SCRUB	21.81
	COYOTE BRUSH SCRUB	0.73
	MULEFAT SCRUB	1.92
	DISTURBED VENTURAN COASTAL SAGE SCRUB	4.31
	DISTURBED MULEFAT SCRUB	0.30
	POISON OAK SCRUB	0.17
	SOUTHERN WILLOW SCRUB	0.05
	UNDIFFERENTIATED CHAPARRAL SCRUB	18.05
	SOUTHERN WILLOW SCRUB/MULEFAT SCRUB	0.39
GRASSLAND COMMUNITIES		
	NON-NATIVE GRASSLAND	1.90
WOODLAND/FOREST COMMUNITIES		
	COAST LIVE OAK WOODLAND	7.64
	WESTERN SYCAMORE-COAST LIVE OAK	9.27
	WESTERN SYCAMORE-WILLOW RIPARIAN FOREST	0.05
	CALIFORNIA WALNUT WOODLAND	0.62
DEVELOPED/DISTURBED AREAS		
	DISTURBED	67.61
	EXISTING MEMORIAL PARK/FACILTIES	6.51
	ORNAMENTAL/NON-NATIVE	1.22
TOTAL AREA		**145.76**

PROJECT DEVELOPMENT

FOREST LAWN PROPERTY BOUNDARY

GRAPHIC SCALE

600 0 300 600

(IN FEET)

1 inch = 600 ft.

Source: TERACOR Resource Management, 2010.

matrix environmental

Figure IV.C-4

Affected Vegetation Communities

Table IV.C-2
Regulatory Status Animal Species and Habitats

Native Vegetation Community	Acreage Impacted	Potential Species Impacted/Species Status
Undifferentiated chaparral scrub	18.05	State Fully Protected (SFP): ringtail Species of Special Concern (SSC): California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat
Venturan coastal sage scrub	21.81	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat *City of Los Angeles CEQA Thresholds Guide* Local List (CLA): Southern California rufous-crowned sparrow
Coastal sage chaparral scrub	3.21	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat CLA: Southern California rufous-crowned sparrow
Disturbed Venturan coastal sage scrub	4.31	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat CLA: Southern California rufous-crowned sparrow
Mulefat scrub	1.92	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, yellow warbler
Southern willow scrub	0.05	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, yellow warbler, western red bat
Coyote brush scrub	0.73	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat

Table IV.C-2 (Continued)
Regulatory Status Animal Species and Habitats

Native Vegetation Community	Acreage Impacted	Potential Species Impacted/Species Status
Disturbed mulefat scrub	0.3	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake
Southern willow scrub/mulefat scrub	0.39	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, yellow warbler
Poison oak scrub	0.17	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, coast horned lizard, San Diego desert woodrat
Western sycamore/coast live oak	9.27	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, yellow warbler, pallid bat, spotted bat, western mastiff bat, western red bat CLA: Cooper's hawk
Coast live oak woodland	7.64	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, pallid bat, spotted bat, western mastiff bat, western red bat CLA: Cooper's hawk
Western sycamore/willow riparian forest	0.05	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, yellow warbler, pallid bat, spotted bat, western mastiff bat, western red bat CLA: Cooper's hawk
California walnut woodland	0.62	SFP: ringtail SSC: California legless lizard, California mountain kingsnake, coast patchnose snake, pallid bat, western mastiff bat, western red bat CLA: Cooper's hawk

Table IV.C-2 (Continued)
Regulatory Status Animal Species and Habitats

Native Vegetation Community	Acreage Impacted	Potential Species Impacted/Species Status
Total Native Vegetation Community Impacts Per Animal Species	[68.5]	ringtail, California legless lizard, California mountain kingsnake, coast patchnose snake
	[48.3]	San Diego desert woodrat, coast horned lizard
	[29.3]	Southern California rufous-crowned sparrow
	[17.6]	Cooper's hawk, pallid bat, western mastiff bat, western red bat
	[17.0]	spotted bat
	[11.7]	yellow warbler
	[68.5]	**Total Habitat Impacted Acreage**

Source: TERACOR Resource Management, 2010.

adjacent habitat carrying capacity negatively affected via competition by displaced organisms. As adjacent habitats adjust to influx from displaced individuals, effects range from minor and temporary to direct loss of some organisms which are out-competed for resources.

Vibration and noise associated with Project grading and construction may also have indirect effects on wildlife. The proposed Project would use controlled blasting in connection with some of the grading activity (up to 50 events). Each blasting event would last for a maximum of two seconds, and the blasting events would be intermittent throughout the 15-year grading period for the Project. A number of studies have been conducted regarding the effects of noise and vibration from construction activities on carnivores, raptors, and large ungulates (e.g., caribou and moose) in connection with mining and oil and gas exploration and military activity, and these studies have shown that the effects of noise and vibration on wildlife from such activities are not substantial.[18] In addition, it is generally accepted that most wildlife become accustomed to urban noise, and the wildlife in the vicinity of the Project Site are in an area that is already subject to urban noise and similar disturbances. As described in Section IV.I, Noise, of this Draft EIR, the proposed Project would result in less-than-significant noise impacts associated with construction activities with mitigation, and potential vibration impacts associated with construction-related controlled blasting would also be less than significant. Given the limited number and instantaneous nature of controlled blasting events, as well as the documented general adaptability of wildlife to urban noise and vibrations, no significant impacts are expected to occur in connection with Project grading and construction.

Periodic maintenance activities within Sennett Creek and debris basins (i.e., to thin dense vegetation and remove accumulated biomass such as downed trees and trash and similar debris) to maintain storm flow capacity would generally be conducted outside of the bird nesting season and under the direction of a biological monitor, thus any potential impacts associated with maintenance activities would not be significant.

Many of the organisms potentially impacted by the proposed Project are considered relatively common on a statewide basis, or are locally common, and are not considered rare or sensitive enough to warrant designation as a regulatory status animal by the City, state or federal governments. These types of animals include mule deer, northern raccoon, bobcat, western harvest mouse (*Reithrodontomys megalotis*), dusky-footed woodrat (*Neotoma fuscipes*), house finch (*Carpodacus mexicanus*), California towhee (*Pipilo*

[18] *For additional detail regarding noise impacts to wildlife, see Appendix C-1, General Biological Assessment of this Draft EIR.*

crissalis), canyon wren (*Catherpes mexicanus*), Bewick's wren (*Thryomanes bewickii*), California kingsnake (*Lampropeltis getula californiae*), Pacific chorus frog (*Pseudacris regilla*), and western toad (*Bufo boreas*), among others. The proposed Project would result in the loss of some common organisms, but such losses are not considered significant under CEQA. Approximately 70.42 acres of habitat for common animals would be removed with implementation of the proposed Project. The loss of habitat for common animal species is not considered significant because more common, generalist species are not considered in decline regionally or on a statewide basis. Common animals can sometimes adapt to the changed condition, move into adjoining habitats, or relocate to a new location if they are mobile enough to do so.

The species and/or subspecies described in this subsection are regulatory status species that have been confirmed present or have a moderate or high possibility of occurring on the Project Site.[19]

Table IV.C-1 on page IV.C-28, demonstrates 70.42 acres of the remaining approximately 120 acres of natural habitat for animals on the Project Site would be removed with implementation of the proposed Project. Table IV.C-2 on page IV.C-31 identifies the habitats on the Project Site in which those species determined to have at least a moderate potential of occurrence may be present.

The following impacts to regulatory status faunal resources have been identified based on the physical limits of the proposed Project, the confirmed presence of animals, and the presumed presence of animals not detected but determined to have a moderate or high probability of occurring on the Project Site.

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[19] *Species designated as Special Animals that are confirmed present or are potentially present on the Project Site are provided in appendices to the General Biological Assessment, attached as Appendix C to this Draft EIR. Neither CEQA nor the City of Los Angeles CEQA Thresholds Guide requires an assessment of impacts to Special Animals; accordingly, any potential impacts to these species would be less than significant. Nevertheless, 70.42 of the acres potentially impacted by the proposed Project could potentially be occupied with at least one, and up to 11, species of CDFG-designated Special Animals. Any potential impacts to Special Animals would be reduced with the implementation of the mitigation measures below. These species include: monarch butterfly (Danaus plexippus), coastal whiptail (Aspidoscelis tigris stejnegeri), San Bernardino ringneck snake (Diadophis punctatus modestus), oak titmouse, lark sparrow (Chondestes grammacus), Nuttall's woodpecker (Picoides nuttallii), Allen's hummingbird (Selasphorus sasin), chipping sparrow (Spizella passerina), hoary bat (Lasiurus cinereus), small-footed myotis (Myotis ciliolabrum), and Yuma myotis (Myotis yumanensis).*

(a) Regulatory Status Reptile Species

Three regulatory status reptile species – California mountain kingsnake, coast horned lizard, and coast patchnose snake – have a moderate or high potential to occur on the Project Site, and one regulatory status reptile species – California legless lizard – is confirmed present on the Project Site. The proposed Project could remove up to 68.5 acres of habitat that is potentially occupied by the California mountain kingsnake, California legless lizard and coast patchnose snake, and up to 48.3 acres of habitat that is potentially occupied by coast horned lizard. This potential impact to up to four regulatory status reptile species could be considered potentially significant prior to mitigation. However, the mitigation measures provided below, including Mitigation Measures C-1 through C-6, C-10, C-15, C-16, and C-18, would reduce these impacts to less than significant levels.

(b) Regulatory Status Bird Species

Two regulatory status bird species – Cooper's hawk and yellow warbler – are confirmed present for nesting on the Project Site; another regulatory status bird species, Southern California rufous-crowned sparrow, is confirmed present. The proposed Project could remove up to 17.6 acres of habitat potentially occupied by Cooper's hawk, up to 11.7 acres of habitat potentially occupied by yellow warbler, and up to 29.3 acres of habitat potentially occupied by Southern California rufous-crowned sparrow. This potential impact to up to three regulatory status bird species would be potentially significant prior to mitigation. In addition, Project construction would temporarily reduce available nesting habitat for birds in the area. However, implementation of the proposed mitigation measures provided below, including Mitigation Measures C-1 through C-6, C-9, C-11, C-15, C-16, and C-18 would reduce the impacts to these three regulatory status bird species to a less than significant level.

(c) Regulatory Status Small Mammal Species

One regulatory status small mammal species, San Diego desert woodrat, has been confirmed present on the Project Site, and the ringtail has a moderate likelihood of occurrence. The proposed Project could remove up to 48.3 acres of habitat that is potentially occupied by San Diego desert woodrat, and up to 68.5 acres of habitat that is potentially occupied by ringtail. This potential impact to up to two regulatory status small mammal species could be considered potentially significant prior to mitigation. However, implementation of the proposed mitigation measures below, including Mitigation Measures C-1 through C-6, C-15, C-16, and C-18 would reduce the impacts to these two regulatory status small mammal species to a less than significant level.

(d) Regulatory Status Bat Species

One regulatory status bat species, western red bat, has a high likelihood of occurrence on the Project Site, and three regulatory status bat species – pallid bat, spotted bat, and western mastiff bat – have a moderate likelihood of occurrence. The proposed Project could remove up to 17.6 acres of habitat that is potentially occupied by western red bat, pallid bat, and western mastiff bat, and up to 17 acres of habitat that is potentially occupied by spotted bat. This potential impact to up to four regulatory status bat species could be considered potentially significant prior to mitigation. However, implementation of the mitigation measures provided below, including Mitigation Measures C-1 through C-6, C-12, C-13, C-15, C-16, C-18, and C-19 would reduce the potential impacts to these four regulatory status bat species to a less than significant level.

In addition, all impacts related to displacement, incidental death, and loss of occupied habitat by regulatory status animal species would be mitigated by the mitigation measures provided below. Furthermore, the proposed Project would conserve approximately 13.9 acres of riparian-associated habitats, which would conserve micro-movement corridors for surface water dependent organisms and riparian-dwelling songbirds. Overall, implementation of the mitigation measures provided below, including Mitigation Measures C-1 through C-6, C-9 through C-16, C-18, and C-19 would reduce all impacts to regulatory status animal species to a less than significant level.

(3) Potential Regulatory Status Plant Species Impacts

Three regulatory status plant species or subspecies (Catalina mariposa lily, ocellated Humboldt lily, and Southern California black walnut) are confirmed present on the Project Site. Implementation of the proposed Project would result in the removal of approximately 65 individual Catalina mariposa lilies, seven individual ocellated Humboldt lilies, and 144 Southern California black walnut trees. Under *the City of Los Angeles CEQA Thresholds Guide* significance threshold, the potential impacts to these three plant species would be considered significant prior to mitigation. However, implementation of the mitigation measures provided below, including Mitigation Measures C-1, C-2, and C-4 through C-7 would reduce all impacts to regulatory status plant species to a less than significant level.

Coulter's matilija poppy, which was detected on the Project Site, is considered to be the result of its use as a cultivar. Coulter's matilija poppy does not occur in the Santa Monica Mountains naturally. Although the entire stand of approximately 15–30 shoots would be impacted by Project implementation, this impact would not be significant, given that it is a cultivar. Accordingly, no mitigation is required.

(4) Potential City of Los Angeles Protected Tree Impacts

The proposed Project has the potential to remove 835 protected trees on the Project Site, specifically 632 coast live oak trees, 59 western sycamore trees, and 144 Southern California black walnut trees. Of the 632 coast live oaks proposed for removal, 440 are located within CDFG jurisdictional areas and 192 are located within upland areas. All 59 western sycamore trees proposed for removal are located within CDFG jurisdictional areas. Of the 144 Southern California black walnut trees proposed for removal, 63 are located within CDFG jurisdictional areas and 81 are located within upland areas. The permanent loss of these trees is a potentially significant impact prior to mitigation. However, implementation of the mitigation measures provided below, including Mitigation Measures C-2, C-5, C-8, and C-9 would reduce impacts to less than significant levels.

(5) Potential Resource Agency Jurisdictional Impacts

(a) Army Corps of Engineers "Waters of the U.S."

The proposed Project has the potential to permanently impact 2.37 acres of "waters" on the Project Site, consisting of 1.73 acres of non-wetland "waters" and 0.64 acre of wetland "waters." These potential impacts would be considered significant prior to mitigation. Most of the impacts that would occur in connection with Project implementation would be associated with tributary drainages to Sennett Creek and Drainage L. Though Sennett Creek itself would be largely left intact, the proposed Project includes a culvert crossing in Sennett Creek similar in design to existing crossings. Approximately 0.05 acre of Corps jurisdictional wetland "waters" (a subset of the 2.37-acre total) would be impacted by the proposed culvert crossing. Implementation of the proposed mitigation program below, including Mitigation Measures C-1, C-4 through C-6, C-8, C-15 through C-17, and C-21 would reduce the impacts to "waters" to a less than significant level. A copy of the Application for Department of the Army Permit for the Project submitted to the Army Corps of Engineers in November 2010 is attached within Appendix C to this Draft EIR.

(b) California Department of Fish and Game "Streambeds"

The proposed Project has the potential to permanently impact 7.94 acres of CDFG "streambeds." The permanent loss of 7.94 acres of "streambeds" would be a potentially significant impact prior to mitigation. Most of the impacts that would occur in connection with Project implementation would be associated with tributary drainages to Sennett Creek and Drainage L. Though Sennett Creek would be largely left intact, as noted above, the proposed Project includes a culvert crossing in Sennett Creek similar in design to existing crossings. Approximately 0.33 acre of CDFG jurisdictional "streambeds" (a subset of the 7.94-acre total) would be impacted by the proposed culvert crossing. Implementation of the proposed mitigation program below, including Mitigation Measures C-1, C-4 through C-6, C-8, C-15 through C-17, and C-21 would reduce the impacts to streambeds to a less

than significant level. A copy of the Notification of Streambed Alteration for the Project submitted to the California Department of Fish and Game in November 2010 is attached within Appendix C to this Draft EIR. In addition, a copy of the Water Quality Certification Application for the Project submitted to the California Regional Water Quality Control Board in December 2010 is attached within Appendix C to this Draft EIR.

(6) Wildlife Movement

The Project Site is comprised of approximately 324 acres of developed memorial-park, associated disturbed areas, and ornamental/non-native areas, as well as approximately 120 acres of relatively natural habitat, as described in section 2.b(4) above, 70.42 acres of which would potentially be impacted by the proposed Project. The Project Site is located between the Los Angeles Basin and the San Fernando Valley, and, as described above, is surrounded by a mosaic of natural open space, existing development and disturbed areas. Although Griffith Park and other undeveloped lands are directly south, east and west of the Project Site, the other surrounding areas are highly urbanized and would be rarely utilized by wildlife other than those adapted to urban environments.

The functional natural habitat within the Project Site is at the edge of the "island" of natural habitat area in the Hollywood Hills that includes Griffith Park. As such, the 70.42 acres of natural areas on the Project Site that would be impacted by the proposed Project do not function as a "macro-corridor"; rather, they are a small piece (approximately 1.9 percent) of the approximate 3,600 acre "island" of remnant natural habitat in the easternmost Santa Monica Mountains. A review of current aerial photography and knowledge of this area generally suggests that this "island" of relatively natural habitat is, in itself, largely isolated. It has no connective habitat to natural areas west of the Hollywood Freeway. No discernable corridors or critical pathways for terrestrial wildlife have been identified. However, many birds permanently resident to the area would be capable of flying across the Cahuenga Pass, and certainly seasonal residents would do so.

Sennett Creek and its tributaries likely function as movement pathways (or micro-corridors) for organisms in search of water or other stream-related resources on a daily, periodic or seasonal basis. When water is not present in higher elevation areas, animals dependent on surface water may move farther downstream and into the Project Site to drink. Stream-associated avian species, like yellow warbler or Pacific-slope flycatcher, and amphibians also inhabit and move along Sennett Creek and its tributaries. These stream-associated organisms are directly dependent on the riparian habitat which is found along these tributaries.

The proposed Project would directly eliminate approximately 58.4 acres of upland habitat on the Project Site that is likely used for animal movement (e.g., chaparral, sage

scrub, coastal sage chaparral scrub, non-native grassland, coyote brush scrub, poison oak, coast live oak woodland, and California walnut woodland), but conversion of those areas to memorial-park (and associated structures and infrastructure) would not eliminate the potential for upland species in the larger habitat complex to move across the north face of the Hollywood Hills. Substantial areas are present on both the north and south face of the Hollywood Hills to allow mobile organisms to move as necessary for their survival. The relatively small area affected by the Project supports a proportionally small amount of wildlife movement. Thus, barriers or impediments to movement in this small area would not preclude or eliminate animal movement on the north slope of the Santa Monica Mountains/Hollywood Hills (see Figure IV.C-3 on page IV.C-21, Biogeographic Aerial Photograph). It is unlikely that the proposed Project, which is at the edge of the Hollywood Hills/Griffith Park habitat complex, would create a barrier to animal movement in upland areas. This impact to upland habitat with respect to animal movement is not expected to be significant.

The proposed Project would impact approximately 12 acres of riparian-associated habitats (e.g., western sycamore/coast live oak, western sycamore/willow riparian forest, southern willow scrub, mulefat scrub, southern willow scrub/mulefat scrub, and disturbed mulefat scrub) on the Project Site. Most of the Sennett Creek tributaries which would be affected by Project development do not contain surface water during summer months, although the lower reaches of Sennett Creek appear to support surface water each year. During summer months when water is scarce and found mostly in lower elevation areas, the preservation of Sennett Creek should provide adequate water resources. Though approximately 12 acres of riparian-associated habitat would be removed and animal movement through Drainages B, C, D, D1, D2, E, F, H, I, J, and M on the Project Site would be impeded with implementation of the proposed Project, the proposed Project would not create a substantial barrier to animal movement given the small area of the larger habitat complex that would be affected. Furthermore, the existing impaired connectivity to the Los Angeles River via Sennett Creek and its tributaries, which provide habitat and cover but no longer have direct ecological connection with the Los Angeles River, as discussed above, would remain in place. Implementation of the proposed mitigation measures below, including Mitigation Measures C-1 through C-6, C-10 through C-16, and C-18 through C-19 would be expected to further reduce impacts, resulting in an overall impact with respect to animal movement that would not be significant.

The Project Site's existing fencing along Forest Lawn Drive (i.e., the north property boundary), along the eastern boundary with Griffith Park, and along a portion of the southern boundary with Griffith Park is expected to remain. Additional fencing or replacement fencing may be installed over time as needed for safety purposes. New fencing, if added, would be placed within the designated disturbance footprint of the Project. Consistent with the existing fencing, any additional fencing along the property line would have little to no effect on birds, small mammals, snakes, lizards, amphibians, and

invertebrates, as they generally do not experience any barriers as a result of the existing fencing. Larger mammals likely use avenues of opportunity to circumvent fencing by jumping or climbing, searching for gaps in drainages or low spots, or using tree limbs or tree canopies that extend over the fence. Thus, the existing fencing and any additional fencing is unlikely to substantially inhibit animal movement, and potential impacts associated with fencing would not be significant.

(7) Griffith Park SEA

The Griffith Park SEA includes approximately 40 to 45 acres of the Project Site, in the southwestern portion of the Project Site where gravel extraction activities previously occurred. Most of the Project Site, including the developed cemetery, is not within the Griffith Park SEA.[20] However, the proposed Project has the potential to indirectly impact the adjacent Griffith Park SEA. Potential indirect impacts include construction noise and vibration, operational noise and vibration of operational aspects of the proposed Project, incidental unintended loss of mobile animals due to memorial park maintenance operations (i.e., mowing, maintenance activities, etc.), competition stress related to influx of displaced animals, and snake and rodent removals from public activity areas if/when these higher mobility organisms move onto developed portions of the Project Site. Consistent with the current cemetery use, the Project would include low levels of evening light. These impacts are not considered to be significant prior to mitigation because they would largely be temporary in nature and would affect only a small portion of the Griffith Park SEA; however, implementation of the mitigation measures provided below would further reduce potential impacts. A direct impact would occur to the small portion of the Griffith Park SEA which is on the Project Site. This area overlies the former gravel extraction area on the southwest edge of the Project Site, within the cemetery property. This area is comprised of undifferentiated chaparral scrub, Venturan coastal sage scrub, disturbed Venturan coastal sage scrub, coastal sage chaparral scrub, mulefat scrub and southern willow scrub plant communities and disturbed areas. These vegetation communities were established as interim plant covers following cessation of gravel extraction activities and are included in the acreage calculations of vegetation communities on the Project Site. A precise acreage calculation of the affected area is not possible given the generality of SEA mapping techniques and the scale at which the SEA boundary is drawn. The direct impact to the SEA is relatively small, and most of the affected habitat is comprised of previously-disturbed areas. Native soil substrates are disturbed and underdeveloped, and vegetative cover is sparse in most of the SEA area that would be affected by the Project. Therefore, the Project's impact to the Griffith Park SEA is not considered significant. Nonetheless,

[20] *Due to the generality of SEA mapping techniques and the scale at which the SEA boundary is depicted, it is difficult to determine the precise boundary of the SEA.*

mitigation measures provided below, including Mitigation Measures C-1 through C-6, C-8 through C-11, C-14 through C-16, C-19, and C-20 would further reduce impacts related to the loss of animals and plants located within the small portion of the Griffith Park SEA on the Project Site.

In order to address possible catastrophic flooding, and in response to flooding at the west edge of the Project Site that occurred in late 2007/early 2008 (subsequent to the Griffith Park/Cahuenga Peak/Oakwood fire of March 2007), the Project includes the construction of several detention basins upstream of the proposed Project. These basins can, for the most part, be constructed on the Project Site. In three instances, however, the basins would extend beyond the property line into Griffith Park. This situation occurs because of topographic constraints, the requisite size of the basins, and other engineering considerations. The affected areas are all within land previously dedicated to the City of Los Angeles by Forest Lawn. At the time the property was conveyed, Forest Lawn included provisions for the construction of detention basins, as necessary, on the dedicated property.[21] The total area on Griffith Park that would be affected from construction of the three basins is 0.79 acre.

Direct impacts to the Griffith Park SEA would occur as a result of the construction of the three off-site basins (or portions thereof). The construction of the three off-site basins would result in the loss of 0.22 acre of potentially jurisdictional “waters of the U.S.,” 0.28 acre of potentially jurisdictional “streambeds,” 18 protected trees (including 14 coast live oak and four [4] southern California black walnut), 19 Humboldt lily plants, and 0.59 acre of habitat/vegetation communities (including 0.08 acre of Venturan coastal sage scrub, 0.32 acre of undifferentiated chaparral scrub, 0.04 acre of non-native grassland, 0.06 acre of coast live oak woodland, 0.02 acre of California walnut woodland, and 0.07 acre of coast live oak woodland/California walnut woodland) within Griffith Park. These acreages are not additive (i.e., the 0.22 acre of "waters of the U.S." is a subset of the 0.28 acre of "streambeds," and both are a subset of the 0.59 acre of habitat/vegetation communities). As noted above, these impacts would occur on portions of the Griffith Park property that were previously dedicated to the City by Forest Lawn with the right to construct detention basins. These impacts to the Griffith Park SEA are not considered significant. Nonetheless, mitigation measures provided below, including Mitigation Measures C-4, C-5, and C-8 would further reduce impacts within the Griffith Park SEA.

[21] *Provisions for the construction of detention basins are discussed in Appendix D-2, Impacts Assessment, of this Draft EIR.*

4. Cumulative Impacts

Cumulative impacts are impacts to biological resources that are a consequence of aggregate past, present, and foreseeable impacts of the proposed Project and other projects located within the vicinity of the Project Site. To evaluate cumulative impacts, the proposed Project and related projects identified in Section III, Environmental Setting, were analyzed.

As discussed above, although Griffith Park and other undeveloped lands are directly south, east and west of the Project Site, the other surrounding areas are highly urbanized and would be rarely utilized by wildlife other than those adapted to urban environments. The functional natural habitat within the Project Site is at the edge of the Hollywood Hills/Griffith Park habitat complex, and the 70.42 acres of natural areas on the Project Site that would be impacted by the proposed Project comprise just 1.9 percent of the approximate 3,600 acre "island" of remnant natural habitat in the easternmost Santa Monica Mountains. Thus, the Project Site does not function as a "macro-corridor" for biological resources. This "island" of relatively natural habitat is, in itself, largely isolated, lacking any connective habitat to natural areas west of the Hollywood Freeway. Nor have corridors or critical pathways for terrestrial wildlife been identified. While birds and highly mobile animals may be able to traverse the Cahuenga Pass, the Project Site is not considered to be a major wildlife movement corridor, especially given the highly urbanized condition of its surroundings.

As discussed below, the proposed Project would not have a significant impact on biological resources (including vegetation communities, regulatory status animal or plant species, protected trees, or jurisdictional features) with implementation of the proposed mitigation program. Any impacts to biological resources similar to those impacted by the proposed Project as a result of the related projects would likely be subject to mitigation, resulting in less than significant impacts for those related projects as well.

Although the proposed Project would remove a small amount of available nesting habitat for birds, this is unlikely to result in a cumulative impact. Much of the remaining undeveloped nesting habitat in Southern California remains publicly owned, and, therefore, is likely to remain intact. Nor will foreseeable related projects remove substantial amounts of nesting habitat, as they primarily exist in highly urbanized areas that are largely unsuitable for nesting, or are substantially small to have a minor impact on nesting habitat. In addition, related projects would also be subject to compliance with the Migratory Bird Treaty Act and mitigation requirements with respect to nesting birds, as applicable. Thus, when considered in conjunction with related projects, the proposed Project is unlikely to result in cumulative impacts to biological resources, especially after implementation of the proposed mitigation measures.

5. Mitigation Measures

The proposed mitigation measures consist of a range of actions that would conserve, enhance and create habitats to offset the potentially significant impacts of the proposed Project and further reduce the Project's less than significant impacts. The potential impacts, detailed previously in this section, include impacts to on-site biological resources in the following resource categories: (1) vegetation communities; (2) regulatory status animal species; (3) regulatory status plant species; (4) protected trees; and (5) jurisdictional waters and streambeds. Specific mitigation measures, described below, would reduce the potential impacts of the proposed Project to a less than significant level.

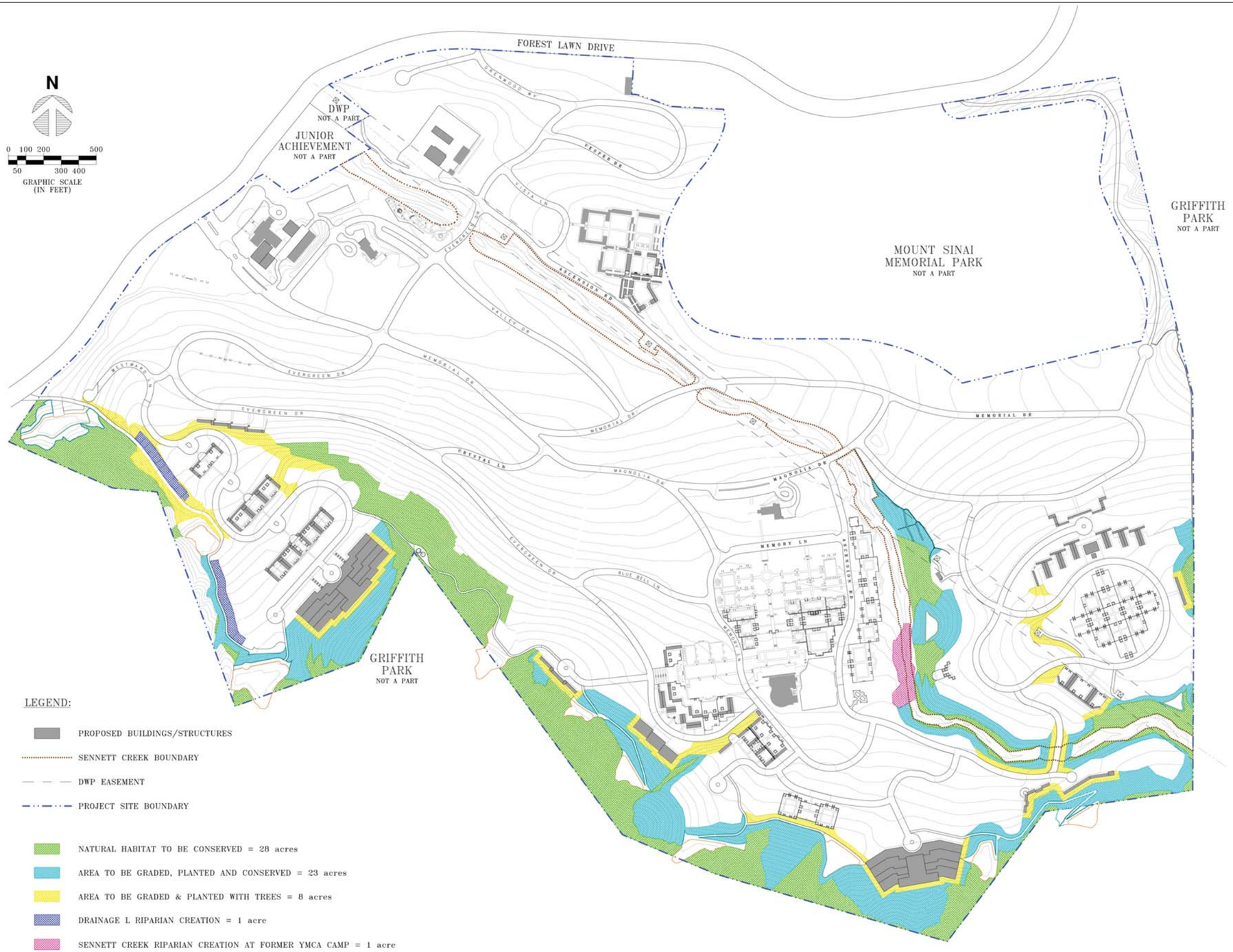
Impacts not considered potentially significant under the *City of Los Angeles CEQA Thresholds Guide*, such as the removal of disturbed open space areas adjacent to natural habitat areas or indirect impacts to adjacent Griffith Park land (e.g., noise or human activity), have also been addressed in the mitigation program to reduce the non-significant, cumulative impacts of the proposed Project.

The mitigation measures include the preservation and enhancement of natural areas on the Project Site that would not be affected by the proposed Project (other than areas that are already conserved or may be more appropriate as buffer areas between cemetery development and conserved natural areas). The mitigation also includes measures to: plant graded slopes on-site with native plant communities, including coast live oak and Southern California black walnut trees; create and restore riparian habitat on-site within Drainage L and adjacent to Sennett Creek; and implement a habitat improvement and monitoring program for the designated areas on the Project Site. The final acreage amounts and locations of the mitigation areas on-site described below would be established in accordance with the final design plan for the Project approved by the applicable agencies.

As the biological resources described in this section are interrelated, many of the mitigation measures address impacts in a number of areas. The mitigation program is designed to address the complete ecological system on the Project Site and in on-site and off-site mitigation areas, as well as the mitigation requirements of different applicable agencies.

a. Proposed Mitigation Measures

Mitigation Measure C-1: Forest Lawn shall conserve 28 acres of natural habitat areas on the Project Site in substantial conformance with Figure IV.C-5 on page IV.C-45, On-Site Mitigation Areas. Forest Lawn shall record a covenant and agreement not to develop or bury within the conserved area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in



Source: TERACOR Resource Management, 2010.

matrix environmental

Figure IV.C-5
On-Site Mitigation Areas

accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the conserved area as provided for in Mitigation Measure C-6.

Mitigation Measure C-2: Forest Lawn shall create 23 acres of graded slopes on the Project Site in substantial conformance with Figure IV.C-5 on page IV.C-45, On-Site Mitigation Areas and plant this area with native plant communities such as woodland, chaparral, and scrub in accordance with an upland habitat plan prepared by a qualified biologist/restoration ecologist. This area may include appropriate buffers of native vegetation adjacent to developed cemetery property that may be maintained for fire safety and aesthetic purposes. Forest Lawn shall record a covenant and agreement not to develop or bury within the graded slopes in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the graded slopes as provided for in Mitigation Measure C-6.

Mitigation Measure C-3: Forest Lawn shall create 8 acres of graded slopes on-site and plant the graded slopes with coast live oak and/or Southern California black walnut trees in accordance with a plan prepared by a qualified biologist/restoration ecologist. Such trees may be replacement trees in satisfaction of the proposed Project's tree mitigation requirements. Forest Lawn shall record a covenant and agreement not to develop or bury within the graded slopes in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the graded slopes as provided for in Mitigation Measure C-6.

Mitigation Measure C-4: Forest Lawn shall create, plant, and conserve a 1-acre riparian habitat within the on-site Drainage L area in substantial conformance with the attached Figure IV.C-5 on page IV.C-45, On-Site Mitigation Areas. Western sycamore shall be utilized as a dominant element for planting within this mitigation area. The riparian habitat plan shall be prepared by a qualified biologist/restoration ecologist. Forest Lawn shall record a covenant and agreement not to develop or bury within this area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant

and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for the created area as provided for in Mitigation Measure C-6.

Mitigation Measure C-5: Forest Lawn shall restore and conserve 1 acre of riparian habitat in the area adjacent to Sennett Creek in substantial conformance with Figure IV.C-5 on page IV.C-45, On-Site Mitigation Areas. Western sycamore shall be utilized as a dominant element for planting within this mitigation area. The riparian habitat plan shall be prepared by a qualified biologist/restoration ecologist. Forest Lawn shall record a covenant and agreement not to develop or bury within this area in accordance with the final design plan for the Project approved by the applicable agencies. The timing of submittal and recordation of the covenant and agreement shall be in accordance with Project implementation and subject to the approval of the Department of City Planning. A habitat improvement and monitoring program shall be implemented for this area as provided for in Mitigation Measure C-6.

Mitigation Measure C-6: Forest Lawn shall implement a 5-year habitat improvement and monitoring program for the acreage on the Project Site described in Mitigation Measures C-1 through C-5, which may include, but not be limited to, the following components within designated areas, as applicable, in accordance with a plan prepared by a qualified biologist/restoration ecologist:

a. Removal of non-native shrubs, trees and other invasive exotics such as *Arundo, Brassica* and *Cirsium* within conserved areas during the monitoring period by a qualified biologist/restoration ecologist;

b. Selective revegetation of areas with the appropriate native plant species selected by a qualified biologist/restoration ecologist and based on analysis of existing high quality native habitat of the type to be restored;

c. Creation of boulder piles;

d. Creation of brush piles;

e. Placement of coverboards;

f. Placement of salvaged tree materials (i.e., trunks and branches) into conserved areas;

g. Conduct a brown-headed cowbird (*Molothrus ater*) trapping program for 3 years; and

h. Creation of potential bat roosting habitat by installing and maintaining 3 bat houses in suitable locations on the Project Site.

Planting areas within the acreage on the Project Site described in Mitigation Measures C-1 through C-5 may include temporary irrigation necessary to ensure the long-term viability of plantings.

The acreage amounts set forth in Mitigation Measures C-1 through C-5 are estimates. The final acreage amounts shall be established in accordance with the final design plan for the Project approved by the applicable agencies.

Mitigation Measure C-7: Forest Lawn shall use reasonable efforts to salvage seeds and bulbs from Catalina mariposa lily, Southern California black walnut, and ocellated Humboldt lily to be utilized in a propagation program and utilized in the selective revegetation program as provided for in the plan described in Mitigation Measure C-6 prepared by a qualified biologist/restoration ecologist. Collected plant material which cannot be utilized on-site shall be dedicated to a native plant nursery or conservation entity skilled and actively engaged in the propagation of plant material to be utilized as deemed appropriate by that entity.

Mitigation Measure C-8: Forest Lawn shall retain a qualified biologist/restoration ecologist to identify degraded on-site and off-site streambeds and/or "waters of the U.S." (i.e., CDFG, Regional Water Quality Control Board and/or Corps jurisdictional areas) and identify opportunities for creation, restoration and/or enhancement. Areas for consideration may include areas on the Forest Lawn Property or other properties located within the Los Angeles River watershed, including headwaters of the Los Angeles River.

The acreage to be created, restored or enhanced shall be determined on a mitigation-to-impact ratio (e.g., 1:1 or 2:1) and based on functional assessments (CRAM or similar methodology) of both impacted areas and proposed mitigation areas. Mitigation for Project impacts generally should be calculated at a 1:1 ratio for creation; a 2:1 ratio for restoration; and a 3:1 ratio for enhancement subject to approval of the applicable agencies. Implementation of this mitigation measure may also be satisfied by payment of a mitigation fee to a third party responsible for mitigation implementation and long-term maintenance for off-site mitigation, subject to the approval of CDFG, the Corps, and the Regional Water

Quality Control Board, as applicable. Functional assessments are not required for pre-existing mitigation banks.

The qualified biologist/restoration ecologist and/or third party responsible for off-site mitigation, if applicable, shall consult with the Corps, Regional Water Quality Control Board and CDFG regarding appropriate mitigation site selection. If a pre-existing mitigation bank or similar instrument is not in place, the biologist/ecologist shall prepare a creation, restoration and/or enhancement plan for the mitigation areas. The plan shall demonstrate that the restoration areas are hydrologically and edaphically (soil-relatedly) suitable for the permanent establishment of a self-sustaining riparian area, subsequent to creation/restoration/enhancement techniques. The plan shall also demonstrate that the area(s) proposed for mitigation can be permanently conserved and protected, and shall include assurances to effectuate permanent conservation and protection. The plan shall obtain all necessary City approvals, as applicable.

To offset temporal effects of Project implementation, construction of the riparian habitat within Drainage L as provided for in Mitigation Measure C-4 shall be initiated within 6 months of commencement of Project construction activities in jurisdictional areas. Further, creation, conservation, and restoration of remaining areas as provided for in Mitigation Measures C-1, C-2, C-3, and C-5 and this mitigation measure may be implemented on a phased basis in accordance with Project implementation, subject to approval of CDFG and the Corps, as applicable.

Mitigation Measure C-9: Prior to the removal of any coast live oak, western sycamore, or Southern California black walnut tree(s) greater than or equal to 4 inches at diameter-at-breast height ("DBH"), Forest Lawn shall prepare a map, based on the existing tree report and corresponding to the particular phase of development proposed, indicating the specific tree(s) and its tag number, to be removed, and the removal of such trees shall be mitigated for as follows:

a. The replacement ratios for riparian-associated trees in CDFG jurisdictional areas to be removed are as follows: trees between 4 to 5 inches DBH shall be replaced at 2:1; trees from 5 to 12 inches DBH shall be replaced at 3:1; trees from 12 to 24 inches DBH shall be replaced at 5:1; trees from 24 to 36 inches DBH shall be replaced at 10:1; and trees greater than 36 inches DBH shall be replaced at 15:1. Replacement trees shall be acorns or saplings, and shall be of the same species as that removed. Replacement trees may be planted either on the Project Site or off-site, and may be planted in connection with the

creation, restoration, and/or enhancement of habitat required pursuant to other Project mitigation measures.

b. CDFG jurisdictional replacement trees may be used to satisfy the City required replacement of non-jurisdictional trees. If CDFG jurisdictional replacement trees are not used to satisfy City required replacement of non-jurisdictional trees, the replacement ratios for upland trees not within CDFG jurisdictional areas to be removed are as follows: each tree shall be replaced with a coast live oak or Southern California black walnut at a 2:1 ratio at an on-site or other City-approved location:

    i. Coast live oaks shall be replaced either by acorns or by 1-gallon trees. Southern California black walnuts shall be replaced by 1-gallon trees.

c. For each coast live oak greater than or equal to eight inches DBH removed, one of the replacement trees shall include a coast live oak tree sapling that is approximately one inch caliper in thickness and 3 to 4 feet in height. In addition, Forest Lawn shall pay to the City $670 per oak tree removed greater than or equal to eight inches DBH, which sum shall be held in trust for use by the City for oak tree preservation and installation (as required by that certain 1998 Stipulated Judgment between Forest Lawn and the City).

d. Prior to planting of replacement trees, a qualified biologist/ restoration ecologist shall review landscaping and irrigation systems which are adjacent to the replacement trees to determine that such landscaping and irrigation systems are compatible for the survival of the replacement trees.

e. Exemptions from Replacement Tree Requirements.

    i. The routine maintenance of a non-jurisdictional coast live oak, western sycamore or Southern California black walnut tree under the direction of a registered arborist or qualified biologist retained by Forest Lawn shall not require any mitigation.

f. Tree mitigation shall be implemented on a phased basis in accordance with Project implementation, subject to approval of the City, CDFG, and the Corps, as applicable.

g. A tree canopy replacement program may be implemented as an alternative to the tree replacement ratios described above, subject to the approval of the applicable agencies, provided that

any such tree canopy replacement program shall comply with the requirements of the City's Protected Tree Ordinance.

Mitigation Measure C-10: Prior to the commencement of grading activities, Forest Lawn shall retain a qualified biologist to conduct pitfall/funnel trapping and coverboard surveys for regulatory status reptiles within pending disturbance areas and on a weekly basis during the initial two months of ground disturbance. Any regulatory status reptile species captured within pending disturbance areas or during the initial two months of ground disturbance shall be relocated to suitable areas not proposed for disturbance as directed by a qualified biologist. Temporary exclusionary fencing shall be installed as directed by a qualified biologist to discourage relocated regulatory status reptile species from returning to the pending disturbance areas. The installation of exclusionary fencing in suitable habitat shall be phased in accordance with Project grading as it occurs.

Mitigation Measure C-11: If Project grading and construction activities requiring the removal of vegetation occur during the breeding season for birds, nesting bird surveys shall be conducted within the disturbance footprint plus a 100-foot buffer in accordance with the following:

a. A minimum of 2 pre-construction surveys for nesting birds shall be conducted 5 days apart prior to construction. The last survey shall be conducted no more than 3 days prior to the initiation of clearance/construction work;

b. If pre-construction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required;

c. If active nests of birds are found during the surveys, a species-specific no-disturbance buffer zone shall be established by a qualified biologist around active nests until a qualified biologist determines that all young have fledged (no longer reliant upon the nest).

Mitigation Measure C-12: Prior to Project-related clearing, grubbing, demolition, and tree removal, Forest Lawn shall conduct pre-construction surveys, as determined by a qualified biologist, for regulatory status bat roosts within the disturbance footprint and shall include a 100-foot buffer. If present, regulatory status bat species shall be passively relocated under the supervision of a qualified biologist prior to such Project-related construction activities.

Mitigation Measure C-13: If Project-related clearing, grubbing, demolition, and tree removal occur during the maternity roosting season for regulatory

status bat species (April 1 to September 30), a qualified biologist shall survey for regulatory status bat species' maternity roosts within the disturbance footprint and shall include a 100-foot buffer, in accordance with the following measures:

a. A minimum of 2 pre-construction surveys for maternity roosts shall be conducted 5 days apart prior to construction. The last survey shall be conducted no more than 3 days prior to the initiation of clearance/construction work;

b. If pre-construction surveys indicate that maternity roosts are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required;

c. If active maternity roosts of regulatory status bat species are found during the surveys, a no-disturbance buffer zone shall be established by a qualified biologist around such active maternity roosts until a qualified biologist determines that the maternity roost is no longer occupied.

Mitigation Measure C-14: Forest Lawn shall retain a qualified biologist to monitor grading activities on the Project Site. The monitor shall ensure compliance with these mitigation measures. For purposes of these mitigation measures, a qualified biologist/ecologist is defined as a working professional with an educational and work history background in biological disciplines including field biology, plant and animal taxonomy, restoration ecology, biogeography, or related fields, and substantial field experience in cismontane southern California, particularly in riparian, woodland, scrub and chaparral habitats.

Mitigation Measure C-15: Temporary construction fencing shall be installed at the interface of the phased Project development areas and conserved natural areas during grading and construction of those areas.

Mitigation Measure C-16: "No Trespassing – Natural Habitat Area" signs shall be posted on the outside of the construction fencing areas adjacent to conserved natural areas.

Mitigation Measure C-17: Except as provided for in this Mitigation Measure, future landscaping within the to-be-developed cemetery portion of the Project Site shall not include any of the plants listed under the California Invasive Plant Council's Invasive Plant Inventory, dated February 2006 (update dated Spring 2007) with the exception of fescue (Festuca spp.). The use of fescue shall not be permitted within 10 feet of the boundary of the Project Site, within 10 feet of a CDFG jurisdictional streambed, or within 10 feet of any on-site

conserved areas; however, the use of fescue shall be permitted within such 10-foot areas where a physical barrier, as determined appropriate by a qualified biologist, exists between the landscaping and the boundary of the Project Site, the jurisdictional streambed, or the on-site conserved areas. Potential impacts associated with fescue should be minimized by the utilization of sod rather than planting by seed and by periodic mowing to suppress seed production.

Mitigation Measure C-18: All grading and construction contractors shall receive copies of all mitigation measures required to reduce impacts to biological resources. Additionally, verbal instruction shall be provided by Forest Lawn to all site workers to insure clear understanding that biological resources are to be protected on the Project Site in accordance with the mitigation measures. A brochure depicting the sensitive biological resources on-site shall be provided to all grading and construction contractors.

Mitigation Measure C-19: All lighting adjacent to natural areas shall be of low luminescence, directed downward or toward structures, and shielded to the extent necessary to prevent artificial illumination of natural areas and protect nocturnal biological resources, as determined appropriate by a qualified biologist.

Mitigation Measure C-20: Forest Lawn shall mitigate potential impacts from construction of detention basins which are located partially off-site on Griffith Park at a 2:1 ratio. The restoration site(s) shall be located in a canyon area that can be restored in a manner similar in structure and quality to the up to 0.59 acre of habitat types that would be removed as a result of the proposed construction or partial construction of three debris basins located on the Griffith Park northerly property boundary. The restoration program should be designed in a Habitat Mitigation and Monitoring Program (HMMP), to be prepared by Forest Lawn or its designated agents and approved by the City Planning Department and Recreation and Parks Department and applicable agencies. The program shall include replacement of protected trees that would be removed with project implementation, in a manner consistent with Proposed Mitigation Measure C-9, above, relative to protected tree replacement parameters. Appropriate relocation of detected ocellated Humboldt lilies that would be disturbed by off-site basin construction shall also be required in the HMMP. Lastly, “waters of the U.S.” and streambed areas disturbed by basin construction shall be mitigated at a 2:1 basis at the restoration site described above or at an off-site location approved by the Corps and CDFG, in a manner consistent with Mitigation Measure C-8 relative to the restoration of “waters” and streambeds in the Los Angeles River watershed.

Mitigation Measure C-21: Prior to the issuance of grading permits for the Project, Forest Lawn shall obtain all necessary permits from the Army Corps, CDFG, and the RWQCB, as applicable.

6. Level of Significance After Mitigation

a. Vegetation Communities

All impacts related to the removal of 70.42 acres of vegetation communities on-site would be mitigated by Mitigation Measures C-1 through C-6, above, which provide for the conservation, restoration, and creation of natural habitat areas on the Project Site, and a five-year habitat improvement and monitoring program for the conserved areas on the Project Site. In addition, Mitigation Measure C-8, which provides for the creation, restoration, and/or enhancement of additional riparian habitat, would further mitigate the Project's impacts to vegetation communities. Further, Mitigation Measures C-15, C-16, and C-17, which provide for fencing at the interface of Project development areas and conserved natural areas and limit the use of invasive plants, would also mitigate impacts to vegetation communities. Implementation of these proposed mitigation measures would reduce all impacts to vegetation communities to a less than significant level.

b. Regulatory Status Reptile Species

As described above, potential impacts to up to four regulatory status reptile species could be considered potentially significant prior to mitigation. As set forth in Mitigation Measure C-10, prior to the commencement of grading activities, the Applicant shall retain a qualified biologist to conduct pitfall/funnel trapping and coverboard surveys for regulatory status reptiles within pending disturbance areas. Any regulatory status reptile species captured within pending disturbance areas would be relocated to areas not proposed for disturbance, and temporary exclusionary fencing would be installed to discourage relocated regulatory status reptile species from returning to construction areas. Implementation of Mitigation Measure C-10, as well as additional mitigation measures provided above would reduce the potential impacts to the four regulatory status reptile species to a less than significant level.

c. Regulatory Status Bird Species

As described above, potential impacts to up to three regulatory status bird species could be considered potentially significant prior to mitigation. Implementation of Mitigation Measure C-11, which requires pre-construction surveys if Project grading and construction activities requiring the removal of vegetation occur during the breeding season for birds, would reduce this impact to a less than significant level. In addition, although Project construction would temporarily reduce available nesting habitat for birds in the area, the

implementation of the protected tree replacement requirements in Mitigation Measure C-9, and the conservation and improvement of habitat as provided for in other mitigation measures would result in the replacement and/or protection of nesting habitat in the form of trees and woodland habitat on the Project Site and in the vicinity. Implementation of the proposed mitigation measures would reduce the impacts to these three regulatory status bird species to a less than significant level.

d. Regulatory Status Small Mammal Species

As described above, potential impacts to up to two regulatory status small mammal species could be considered potentially significant prior to mitigation. However, Mitigation Measures C-1 through C-6, above, which provide for the conservation, restoration, and creation of natural habitat areas on the Project Site, and a five-year habitat improvement and monitoring program for the conserved areas on the Project Site, would mitigate the Project's impacts to regulatory status mammal species. In addition, Mitigation Measures C-15 and C-16, which provide for fencing at the interface of Project development areas and conserved natural areas, would also mitigate impacts to regulatory status mammal species. Implementation of the proposed mitigation measures above would reduce the impacts to these two regulatory status small mammal species to a less than significant level.

e. Regulatory Status Bat Species

As described above, potential impacts to up to four regulatory status bat species could be considered potentially significant prior to mitigation. However, Mitigation Measures C-12 and C-13 would require pre-construction surveys for regulatory status bat roosts and for maternity roosts during the maternity roosting season prior to Project-related clearing, grubbing, demolition, and/or tree removal. Implementation of the proposed mitigation measures would reduce the potential impacts to these four regulatory status bat species to a less than significant level.

f. Summary of Impacts to Regulatory Status Animal Species

All impacts related to displacement, incidental death, and loss of occupied habitat by regulatory status animal species would be mitigated by Mitigation Measures C-1 through C-6, above, which provide for the conservation, restoration, and creation of natural habitat areas on the Project Site, and a five-year habitat improvement and monitoring program for the conserved areas on the Project Site. Also, Mitigation Measures C-8 and C-9, which provide for the creation, restoration, and/or enhancement of additional riparian habitat and the replacement of protected trees, would further mitigate the Project's impacts to regulatory status animal species. Further, Mitigation Measures C-15 and C-16, which

provide for fencing at the interface of Project development areas and conserved natural areas, would also mitigate impacts to regulatory status animal species. In addition, Mitigation Measure C-18, which requires all Project grading and construction contractors to be informed of the mitigation measures to protect biological resources, and Mitigation Measure C-19, which requires lighting adjacent to natural areas to be designed to protect nocturnal biological resources, would further reduce potential impacts to regulatory status animal species. Implementation of these proposed mitigation measures would reduce all impacts to regulatory status animal species to a less than significant level.

g. Potential Regulatory Status Plant Species

Three regulatory status plant species or subspecies (Catalina mariposa lily, ocellated Humboldt lily, and Southern California black walnut) are confirmed present on the Project Site. Under *the City of Los Angeles CEQA Thresholds Guide significance* threshold, the potential impacts to these three plant species would be considered significant prior to mitigation. However, all impacts related to the loss of three regulatory status plant species would be mitigated by Mitigation Measures C-1, C-2, C-4, and C-5, which provide for the conservation of natural areas on the Project Site, and Mitigation Measure C-6, which provides for a five-year habitat improvement and monitoring program for the conserved areas on the Project Site. In addition, Mitigation Measure C-7 requires the Applicant to use reasonable efforts to salvage seeds and bulbs from displaced Catalina mariposa lilies, Southern California black walnuts, and ocellated Humboldt lilies to be utilized in a propagation program and selective revegetation. Collected plant material that cannot be used on the Project Site would be dedicated to a native plant nursery or conservation entity skilled and actively engaged in the propagation of native plant material. Implementation of these proposed mitigation measures would reduce all impacts to regulatory status plant species to a less than significant level

h. City of Los Angeles Protected Trees

As described above, the proposed Project has the potential to remove 632 coast live oak trees, 59 western sycamore trees, and 144 Southern California black walnut trees on the Project Site. The permanent loss of these trees is a potentially significant impact prior to mitigation. However, pursuant to Mitigation Measure C-9, the Applicant must replace all coast live oak, western sycamore, and Southern California black walnut trees greater than or equal to four inches in diameter-at-breast height removed in connection with the Project. Replacement trees would be planted on the Project Site or at approved off-site locations at a 2:1, 3:1, 5:1, 10:1, or 15:1 ratio, depending on the size of the removed tree (diameter-at-breast height) and whether it is in a CDFG jurisdictional area. Replacement trees may be planted in connection with the creation, restoration, and or enhancement of habitat required pursuant to Mitigation Measures C-2 through C-5 and C-8, which would further reduce impacts. Implementation of the proposed tree mitigation program would reduce the

impacts to protected trees to a less than significant level. In addition, the number of replacement trees set forth in the proposed tree mitigation program would exceed the number of replacement trees required by the LAMC.

i. Army Corps of Engineers "Waters of the U.S."

As discussed above, the proposed Project has the potential to permanently impact 2.37 acres of "waters" on the Project Site, consisting of 1.73 acres of non-wetland "waters" and 0.64 acre of wetland "waters." The proposed Project includes a culvert crossing in Sennett Creek similar in design to existing crossings. Approximately 0.05 acre of Corps jurisdictional wetland "waters" (a subset of the 2.37 acre total) would be impacted by the proposed culvert crossing. Mitigation Measure C-1, which provides for the conservation of on-site natural habitat areas; Mitigation Measures C-4 and C-5, which provide for the creation, restoration, and conservation of riparian habitat on-site; Mitigation Measure C-6, which provides for a five-year habitat improvement and monitoring program; and Mitigation Measure C-8, which requires the creation, restoration, and/or enhancement of "waters" and in consultation with the Corps, would mitigate all impacts related to the loss of 2.37 acres of "waters". In addition, Mitigation Measures C-15, C-16 and C-17, which provide for fencing at the interface of Project development areas and conserved natural areas and limit the use of invasive plants, would also mitigate impacts to jurisdictional areas. Furthermore, pursuant to Mitigation Measure C-21, the Project would obtain all necessary permits from the Army Corps, as applicable. Implementation of the proposed mitigation measures would reduce the impacts to "waters" to a less than significant level.

j. California Department of Fish and Game "Streambeds

The proposed Project has the potential to permanently impact 7.94 acres of CDFG "streambeds." In addition, approximately 0.33 acre of CDFG jurisdictional "streambeds" would be impacted by the proposed culvert crossing. Mitigation Measure C-1, which provides for the conservation of on-site natural habitat areas; Mitigation Measures C-4 and C-5, which provide for the creation, restoration, and conservation of riparian habitat on-site; Mitigation Measure C-6, which provides for a five-year habitat improvement and monitoring program; and Mitigation Measure C-8, which requires the creation, restoration, and/or enhancement of "streambeds" in consultation with CDFG, would mitigate all impacts related to the loss of 7.94 acres of "streambeds." In addition, Mitigation Measures C-15, C-16 and C-17, which provide for fencing at the interface of Project development areas and conserved natural areas and limit the use of invasive plants, would also mitigate impacts to jurisdictional areas. Furthermore, pursuant to Mitigation Measure C-21, the Project would obtain all necessary permits from CDFG, as applicable. Implementation of the proposed mitigation measures would reduce the impacts to "streambeds" to a less than significant level.

k. Wildlife Movement

As discussed above, implementation of the Project would not result in significant impacts to animal movement. Implementation of the proposed mitigation measures above would be expected to further reduce impacts.

l. Griffith Park SEA

As discussed above, indirect impacts to the adjacent Griffith Park SEA are not considered to be significant prior to mitigation. However, implementation of the proposed mitigation measures would to further reduce potential impacts. In particular, Mitigation Measures C-10 and C-14 through C-16, which require surveys for and relocation of regulatory status reptiles within pending disturbance areas prior to the commencement of grading activities, as well as the installation of temporary exclusionary fencing and biological monitoring, would further reduce indirect impacts to the Griffith Park SEA. In addition, Mitigation Measure C-19, which requires all lighting adjacent to natural areas to protect nocturnal biological resources as determined appropriate by a qualified biologist, would further reduce the less than significant indirect impact to the Griffith Park SEA

In addition, the Project's direct impacts to the Griffith Park SEA are not considered significant. Nonetheless, implementation of Mitigation Measures C-1 through C-6, which provide for the conservation and enhancement of natural areas on the Project Site, as well as Mitigation Measures C-8 through C-11, which provide for additional habitat creation, restoration, or enhancement, replacement of protected trees, and pre-construction surveys for regulatory status reptiles and birds, would further reduce all less than significant impacts related to the loss of animals and plants located within the small portion of the Griffith Park SEA on the Project Site. Furthermore, Mitigation Measure C-20, which provides for direct impacts related to vegetation communities and "waters" and "streambeds" resulting from the three proposed off-site basins to be mitigated at a 2:1 ratio, will further reduce the less than significant impacts related to the construction or partial construction of detention basins within the Griffith Park SEA.

In conclusion, with implementation of the mitigation measures provided above, the Project would not result in any significant impacts associated with biological resources.

IV. Environmental Impact Analysis

D.1 Cultural Resources – Historic Resources

1. Introduction

The following analysis summarizes the findings and conclusions presented in the *Historical Resources Assessment of the Forest Lawn Memorial-Park - Hollywood Hills*, prepared by LSA Associates, Inc. in June 2009 and the supplemental *Impact Assessment* prepared by LSA Associates, Inc. in September 2010. Copies of these documents are provided in Appendix D-1 and D-2 to this Draft EIR.

2. Environmental Setting

a. Existing Regulatory Framework

A lead agency must consider a property a historic resource under the California Environmental Quality Act if it is eligible for listing in the California Register of Historical Resources (California Register). The California Register is modeled after the National Register of Historic Places. In addition, a property is presumed to be historically significant if it is listed in a local register of historic resources or has been identified as historically significant in a historic resources survey. The National and California Register designation programs, the City of Los Angeles Cultural Heritage Ordinance, and the National Register Bulletins applicable to the evaluation and nomination of designed historic landscapes are summarized below.

(1) Federal

(a) National Historic Preservation Act

Enacted in 1966, the National Historic Preservation Act (NHPA) is the principal federal law dealing with historic preservation. The NHPA establishes a program for the preservation of historic properties throughout the nation, and for other purposes. The NHPA expressly authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places, composed of districts, sites, buildings, structures, and objects significant at the national, state and/or local level.

(i) National Register of Historic Places

To be eligible for listing in the National Register of Historic Places (National Register), a property must be at least fifty years of age and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of four established criteria:

A. Associated with events that have made a significant contribution to the broad patterns of our history; or

B. Associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Yield, or may be likely to yield, information important in prehistory or history.

In addition to the criteria listed above the subject property must also have integrity. Integrity is the ability of a property to convey its significance. The National Register recognizes seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. These qualities are defined as follows:

- *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time.
- *Association* is the direct link between an important historic event or person and a historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- *Location* is the place where the historic property was constructed or the place where the historic event occurred.
- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
- *Setting* is the physical environment of a historic property.
- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

In assessing integrity, the National Register criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic features or characteristics. The property must maintain, however, the essential physical features that enable it to convey its historic identity.

(ii) Designed Historic Landscapes

The United States Department of the Interior's National Register Bulletin #18 – How to Evaluate and Nominate Designed Landscapes – defines a designed historic landscape as "a landscape that has significance as a design or work of art; was consciously designed and laid out by a master gardener, landscape architect, architect or horticulturalist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition." The explicit features of a designed historic landscape may include spatial relationships between contributing features, vegetation, topography, site-furnishings, design intent, architectural features, and a circulation system. Individual features or structures contribute to the overall identity and character of the landscape and, in most instances, should not be considered individually but in terms of their relationship to the totality of the landscape.

Cemeteries, especially those that embody the principles of an aesthetic movement or tradition of design and monumentation through its overall plan and landscaping, are explicitly called out as property types that commonly meet the definition of designed historic landscape. The contributing elements of such cemeteries commonly include gravesites, boundary enclosures, walkways, gateways, road systems, natural and planted vegetation, buildings, structures, and the spatial relationship among all these features.

(2) State

(a) California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[1] The California Register criteria are based on National Register criteria. For a property to be eligible for inclusion in the California Register, one or more of the following criteria must be met:

[1] *California Public Resources Code Section 5024.1(a).*

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. It is associated with the lives of persons important to local, California, or national history;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of a master, or possesses high artistic values; and/or

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance in order to "obtain a scholarly perspective on the events or individuals associated with the resource" (C.C.R. Section 4852 [d][2]).

The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association. In reference to the integrity of designed historic landscapes, the National Register criteria recognize that properties change over time; therefore, it is not necessary for a property to retain all its historic features or characteristics. The property must maintain, however, the essential physical features that enable it to convey its historic identity.

(b) California Environmental Quality Act

Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment."[2] Pursuant to Section 21084.4 of the Public Resources Code, this statutory standard involves a two-part inquiry. The first part involves a determination of whether the project involves a historic resource. If so, then the second part involves determining whether the project may involve a "substantial adverse change in the significance" of the resource. To address these issues, State CEQA Guidelines Section 15064.5, relating to historical resources, were adopted on October 26, 1998.

[2] *California Public Resources Code, Section 21084.1.*

In accordance with Section 15064.5 of the CEQA Guidelines, a project has a significant impact on a historical resource if it would result in a substantial adverse change in the significance of a historical resource. Section 15064.5 of the CEQA Guidelines provides that "[s]ubstantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."[3] Material impairment occurs when a project alters or demolishes in an adverse manner "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" in a state or local historic registry.[4] In essence, a resource is materially impaired when an action would render the resource no longer significant or eligible for inclusion.

(3) Local

(a) City of Los Angeles Cultural Heritage Ordinance

The Cultural Heritage Ordinance was adopted by the Los Angeles City Council in 1962 and amended in 1985 (sections 22.120 et. seq. of the Administrative Code). The Ordinance created a Cultural Heritage Commission and criteria for designating Historic-Cultural Monuments. According to Section 22.171.7 of Chapter 9, Article 1 of the Los Angeles Administrative Code, a historical or cultural monument is any site (including significant trees or other plant life located thereon), building, or structure of particular historical or cultural significance to the City of Los Angeles. This includes:

- Historic structures or sites in which the broad cultural, political, economic or social history of the nation, State or community is reflected or exemplified; or
- Which are identified with historic personages or with important events in the main currents of national, State, or local history; or
- Which embodies the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction; or
- Are a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

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[3] *California Code of Regulations, Title 14, Section 15064.5(b)(1).*

[4] *California Code of Regulations, Title 14, Section 15064.5(b)(2)(A)-(C).*

Unlike the National and California Registers, the Ordinance makes no mention of concepts such as physical integrity or period of significance. Properties do not have to reach a minimum age requirement, such as fifty years, to be designated as monuments.

(b) Hollywood Community Plan

The Forest Lawn Memorial Park – Hollywood Hills property is located within the boundaries of the City's Hollywood Community Plan. In its policy discussion, the Community Plan states that it is the City's policy that the Hollywood community Plan incorporate sites designated as Cultural and Historic Monuments.

The City is currently in the process of updating the Hollywood Community Plan. The Draft Hollywood Community Plan was released for public review on June 29, 2009. Although not yet adopted, the updated Community Plan recognizes the value of Hollywood's impressive historic architecture and cultural resources, and seeks to protect these assets. Specifically, one of the key goals of the Draft Hollywood Community Plan is to conserve viable neighborhoods, districts, and historic/cultural resources. As such, the Draft Hollywood Community Plan contains Policy LU.1.10, which seeks to protect identified historic-cultural resources, and Policy LU.1.14, which encourages the design of new buildings that respect and complement the character of adjacent historic resources.

b. Results of Records Search

The records search conducted by LSA identified that the address of the Forest Lawn Property is listed in the Historic Properties Directory. However, the site description refers to the original Forest Lawn Memorial-Park and Mortuary in Glendale, which opened in 1906 (not the Project Site). No other previously recorded cultural resources were identified within the property, and no previous studies have been done that include the property.

c. Results of Archival Research

(1) Historical Overview

Early urban graveyards were typically located within churchyards at or near the center of a town following a practice that dated back to early England. As time progressed, the absence of planning and maintenance in the early cemeteries led to extensive overcrowding and health hazards.

By the 1830s, the "Rural Cemetery" movement emerged and became the answer to America's cemetery problem. Garden cemeteries replaced the graveyards of the past by promoting cemeteries as peaceful gardens surrounded by nature. This new form of cemetery was first to utilize the nascent concepts of landscape architecture. Cemetery

features, including roads, gates, monuments, and grave markers were designed to complement the natural landscape. Patrons were free to customize and adorn their family plots as elaborately as they wanted. Tombstones became works of art, as masons and sculptors created elaborate memorials to the deceased with stone and marble. Rural cemeteries came to be viewed as public parks, a place to have a pleasant stroll and to admire for its solace and beauty.

The influence of the rural cemetery and landscape architecture movements forever changed the appearance of America's cemeteries. By the late 19th century, the lawn cemetery had become the prevailing style in cemetery design. Strongly influenced by landscape design, the lawn cemetery featured dramatic green landscapes, lightly scattered with maintained trees, shrubs, and small plantings. Cemetery plots were laid out in uniform rows, and grave art was limited to more modest granite and bronze headstones and monuments.

The memorial park cemetery emerged in the early 20th century as a deliberate shift away from the rural cemetery's clutter of individualized graves, and a step beyond the lawn cemetery to eliminate headstones entirely. The keynotes of memorial park planning were natural beauty and economy, resulting in cemeteries that were comprehensively designed and managed by full-time professionals. The memorial park's landscape, which was carefully designed to "enhance" a site's natural beauty, was characterized by memorial tablets flush with the ground and the elimination of plot-defining barriers. Other character-defining features of a memorial park generally include:

- Rolling, grassy hills studded with trees, shrubbery, and statuary, set with rows of interment spaces.
- A curving, asymmetrical pattern of roads and paths that provide vehicle access throughout the memorial park.
- In-ground tablets as opposed to headstones.
- Highly controlled selection of memorial statuary intended to evoke tranquility and timelessness, as opposed to the free accumulation of often-melancholy grave art typified by earlier cemeteries.
- Associated buildings such as churches, mausoleums, and mortuaries that serve the memorial park's primary function, and often represent classic themes such as American history and the Renaissance.
- Architectural features such as plazas, fountains, and monuments that are intended to be a focal point for visitors, possess high artistic value, and often represent classic themes.

Hubert Eaton's redesign of the Tropico Cemetery into the Forest Lawn Memorial-Park in Glendale, California, is often credited as the progenitor of the general memorial park style. Envisioning a beautiful landscape "of great cultural benefit for the living to sacredly enjoy," Eaton made sweeping changes to the layout and function of the cemetery. These physical changes combined with an expanded role in the funeral business and new "before-need" business practices established the memorial park as a popular new cemetery type in 20th century America.

Originally a chemist by profession, Hubert Eaton came to Southern California in 1912 to be a salesman for the Tropico Cemetery in Glendale. He took control of the cemetery in 1917 as general manager, and in that same year instituted several changes according to a Builder's Creed he created. Soon afterward he became chairman of the nonprofit Forest Lawn Memorial-Park Association.

To match his new vision of a great park for the living, Eaton completely abolished tombstones in favor of memorial tablets set into the lawn. In addition to altering the landscape of burial plots, Eaton went beyond the lawn cemetery type by introducing new buildings and statuary to serve regular visitors and the community. Eaton built churches and memorial gardens that the grieving used for funerals, but were also popular for life-affirming ceremonies like weddings and christenings. Auditoriums, art galleries, and other buildings that are not typically related to cemeteries provided public space for non-mortuary events and programming at Forest Lawn.

(a) Forest Lawn Memorial-Park - Hollywood Hills

By 1946, Forest Lawn had acquired approximately 490 acres on the Rancho Providencia and Scott tract, Tract 17266. In 1950, after a four-year permit process, Hubert Eaton finally began construction on the Forest Lawn Memorial-Park - Hollywood Hills, continuing, expanding, and perfecting the principles of memorial park design. The first buildings constructed at the Forest Lawn Memorial-Park - Hollywood Hills were the mortuary and office, a garage, and maintenance warehouse, which were completed in 1951. The Forest Lawn Memorial-Park - Hollywood Hills opened to the public on March 4, 1952. Portions of a mausoleum, the "Court of Remembrance," were constructed in 1957. The roads laid out in 1951 featured a curving, irregular course which, when taken with the rugged surroundings and rolling green hills, were designed to create the effect of a peaceful, rural setting in the heart of the Los Angeles metropolitan area.

Eaton chose a patriotic theme for the Forest Lawn Memorial-Park - Hollywood Hills; the celebration of American heritage, with a particular focus on the Revolutionary War. In establishing the Memorial-Park, he designed a mortuary that resembled Mount Vernon, the home of George Washington, and recreated a church that was the subject of a poetic appeal in 1824 by a young Henry Wadsworth Longfellow to fellow citizens to save it from

demolition. The theme resonated well with post-World War II Los Angeles, and as the Memorial-Park gained popularity, Eaton designed additional paeans to America.

Between 1958 and his death in 1966, Eaton presided over a second wave of development on the Forest Lawn Memorial-Park – Hollywood Hills property, including a "Court of Liberty," where private interment gardens would be rationally apportioned among icons of the Revolutionary War. Eaton also planned the construction of a replica of the Old North Church, origin of the signal alerting Paul Revere to make his famous ride from Lexington to Concord, which was completed in 1965.

Like Forest Lawn in Glendale, the Forest Lawn Memorial-Park – Hollywood Hills property was an almost completely self-sufficient, full-service mortuary, complete with a florist shop, embalming, memorial and casket construction, pre-need sales, and specialized park maintenance vehicles and equipment. Aside from the florist shop and embalming, buildings created for park maintenance and support activities were utilitarian in nature and obscured by discreet fencing, thick shrubbery, and changes in the topography.

Before his death, Hubert Eaton established two more Forest Lawn Memorial-Parks in Cypress (1958) and Covina Hills (ca. 1965).

(b) Forest Lawn Memorial-Park - Hollywood Hills: Designed Historic Landscape

As mentioned above, both the National Register and the California Register contain criteria for assessing a cemetery as a designed historic landscape. Employing these criteria, the developed portion of the Project Site appears to be potentially eligible for designation as a designed historic landscape and potentially eligible for designation as a City of Los Angeles Historic Cultural Monument because it is a notable work of Hubert Eaton, an amateur in landscape design who created the essential tenets of the modern memorial park out of a reaction to earlier movements in cemetery design. The potentially eligible designed historic landscape is located on the developed portion of the Project Site and is composed of a variety of contributing features, including the landscaped Memorial-Park, nine contributing architectural features, six noncontributing architectural features, roadways and paths and various statuary and monuments. The developed portion of the Forest Lawn Memorial-Park – Hollywood Hills property appears potentially eligible for listing as it embodies those distinct characteristics of memorial park cemetery design that sprung from Hubert Eaton's Builder's Creed, design features that came to embody the principles of the memorial park tradition. Character-defining features of the Memorial-Park include a quiet setting, rolling hills landscaped with lawns accented with manicured trees and shrubbery, broad expanses of interment lots characterized by flat bronze tablets set into the ground, and widely dispersed memorial statuary and benches among the interment sites.

The character of the landscaping is park-like, with expansive green lawns and mature shade trees throughout the older portions of the Memorial-Park. Near the buildings, the landscaping becomes more formal and manicured, with closely cropped shrubbery lining walkways and softening the low walls found throughout the Memorial-Park. The Memorial-Park is also characterized by a curving, asymmetrical layout of roads that lead to major architectural features and evoke a sense of rural informality that tempers the more formal layout of interment spaces and monuments. Hardscape consists mainly of low walls and walkways that accent and direct traffic around the church buildings, mausoleums, memorial gardens, and other architectural features.

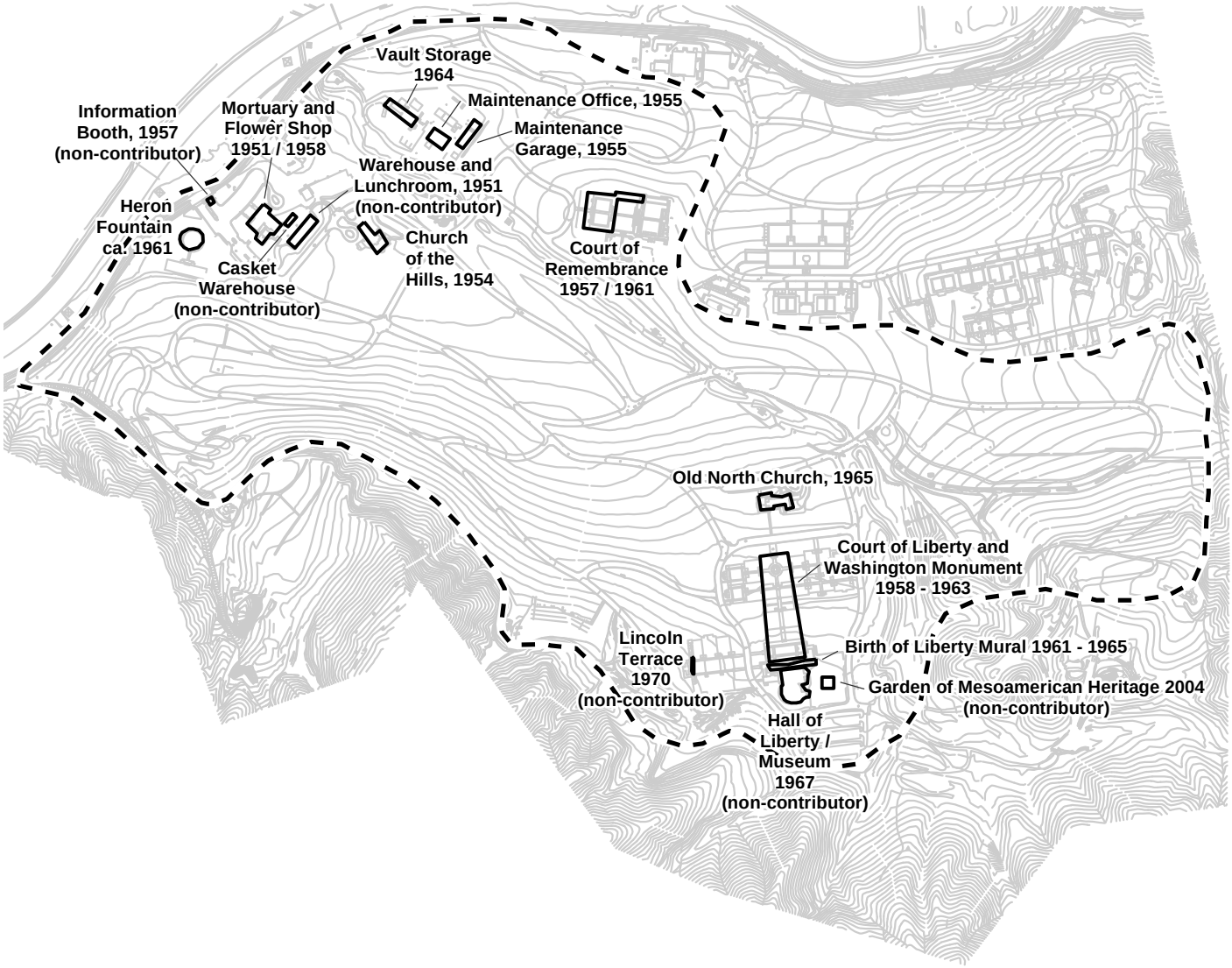
While the landscaped portion of the Forest Lawn Memorial-Park – Hollywood Hills property is the dominant and primary feature of the potentially eligible designed historic landscape, other character-defining features include associated individual buildings and architectural features. These buildings and architectural features are not considered potentially eligible individually, but rather in terms of their relationship to the identity of the overall potentially eligible designed historic landscape.

A brief description of these contributing features, including individual buildings and architectural features, is presented below. A visual depiction of these of these contributing features is found in Figure IV.D.1-1 on page IV.D-11. A complete description of each is presented in the Historical Resources Assessment (see Appendix D-1 to this Draft EIR).

(i) Contributing Features

Landscaped Memorial-Park (1950–1966). The Memorial-Park embodies those distinct characteristics of memorial park cemetery design that sprung from Hubert Eaton's Builder's Creed, design features that came to embody the principles of the memorial park tradition. Character-defining features of the Memorial-Park include a quiet setting, rolling hills landscaped with lawns accented with manicured trees and shrubbery, broad expanses of interment lots characterized by flat bronze tablets set into the ground, and widely dispersed memorial statuary and benches among the interment sites as well as contributing statuary and memorials. The character of the landscape is park-like, with expansive green lawns and mature shade trees throughout the older portions of the Memorial-Park.

Flower Shop and Mortuary (1951). The façade of the three-story reinforced concrete mortuary, completed in 1951, is built to resemble the Potomac-facing elevation of Mount Vernon, the Virginia home of George Washington. The mortuary is rectangular in plan with a side gable roof (Mount Vernon has a hipped roof), a pair of chimneys at the gable ends, and a full-width portico supported by Tuscan columns with Greek Corinthian capitals. Despite historic and non-historic additions to the sides and rear, the mortuary



Source: LSA, 2007.

matrix environmental

Figure IV.D.1-1
Contributing and Non-Contributing features of the Potentially Eligible Designed Historic Landscape

building has retained its integrity (with relation to the exterior of the building) and appears to be in good condition overall.

The Church of the Hills (1954). The Church of the Hills is modeled after the Old Jerusalem Meeting House (also known as the First Parish Meeting House) in Portland, Maine, a 1740 colonial meeting house where Henry Wadsworth Longfellow attended church as a youth and was said to have poetically defended it when the parish proposed to demolish the church in 1824. Overall, the exterior of the church and its associated landscaping have retained their historic integrity.

Heron Fountain and Diana Group (ca. 1961). The Heron Fountain and Diana Group are both located at the entrance to Forest Lawn and are connected by a concrete walkway. The fountain is a shallow concrete basin approximately 100 ft in diameter. The central feature is a grouping of six bronze herons that spray jets of water from their bills approximately 15 feet into the air. They sit on a raised pedestal from which water spills into the basin. Several lower jets surround the pedestal in the basin. The Diana Group, a grouping of marble statues portraying Diana and her attendants, was created by Charles Cassou for William Randolph Hearst's extensive art collection. It was obtained by Eaton and installed around the same time as the installation of the Heron Fountain. The courtyard and statues appear to be in excellent condition and retain a high degree of integrity.

Court of Remembrance, Front Portion (1957–1961). The Court of Remembrance holds the Memorial-Park's mausoleum and columbarium. The front courtyard was constructed within the period of significance; the rear courtyard and two partial adjacent courtyards were constructed between 1970 and the present as more interment space was needed. The original portion of the Court of Remembrance has retained integrity.

Court of Liberty and the Washington Monument (1958–1963). The Court of Liberty was constructed to provide exclusive lawn crypts and private memorial courtyards beneath the gaze of George Washington and other icons of the Revolutionary War. The portion built within the period of significance is composed of the courtyards along the central axis between The Washington Monument and the Birth of Liberty mural.

Birth of Liberty Mural (1961–1965). This mural is a stand-alone structure that measures 162 feet wide by 28 feet tall and is composed of over 10 million glass tiles. The mosaic features 25 scenes from American history from Jamestown and the Mayflower to the surrender of General Cornwallis and the first session of the U.S. Congress. It is set into a 9-foot thick wall of concrete adjacent to the Hall of Liberty, a separate structure.

Old North Church (1965). With the exception of the rear elevation, the Old North Church very closely replicates Boston's Christ Church, which is commonly called the Old

North Church. Overall, the exterior of the Old North Church retains a high degree of integrity.

(ii) Contributing Features of Secondary Significance

These buildings represent Hubert Eaton's desire to expand Forest Lawn's services to include a full range of undertaking services. However, they are separated from the landscaped Memorial-Park by fencing, concealed by mature trees and shrubs, and were not intended to be viewed by guests and visitors. As such, they are not elements of the Memorial Park's designed historic landscape and do not have an architectural character in keeping with that of the Memorial-Park. They are contributing features for their historical associations but are of secondary significance within the context of the Memorial-Park as a designed historic landscape. These contributing features of secondary significance include:

Maintenance Office (1955). The maintenance office is located in the maintenance yard, which is set behind a covered chain-link fence and mature trees and shrubs and is not visible from the Memorial-Park. The exterior of the maintenance office appears to have retained integrity.

Maintenance Garage (1955). The maintenance garage is located in the maintenance yard, obscured from the rest of the Memorial-Park. It is made from prefabricated metal with a gable roof. The exterior of the building appears to have retained integrity.

(iii) Non-Contributing Architectural Features

The following non-contributing features either: (1) do not fit within the period of significance for the Memorial-Park (i.e., 1951-1966) and their history is too recent to have gained a scholarly perspective to evaluate them for individual significance; (2) have been extensively altered; or (3) would be contributing features but are of secondary significance and have already been approved for demolition in connection with interim projects.

Hall of Liberty Museum (1967). This building (for which building permits were issued in November 1967) was constructed after Eaton's death, although it may have been a part of his plan for the Court of Liberty.

Lincoln Terrace (ca. 1970). This courtyard features a bronze statue of Abraham Lincoln in front of murals depicting scenes from his life, the Civil War, and emancipation. Constructed between 1968 and 1970 after the death of Hubert Eaton, it falls outside the period of significance for the Memorial-Park.

Garden of Mesoamerican Heritage (2004). This garden is located east of the Hall of Liberty. It is not a contributing feature because it falls outside the Memorial-Park's period of significance.

Information Booth (2008). This 12-foot square building is situated in the island between the ingress and egress at the entrance to the Forest Lawn Memorial-Park - Hollywood Hills property. It is a reconstruction of a 1957 information booth that was extensively damaged by fire in 2007. Although the reconstruction reinforces the character of the Memorial-Park's historic design, it no longer retains sufficient integrity of materials to be considered a contributing feature.

Warehouse and Lunch Room (1951). This building, though representing the full-service aspect of the Forest Lawn Memorial-Park - Hollywood Hills property, is hidden from the view of visitors and guests and was not intended to be considered a part of the Memorial-Park's designed historic landscape. For this reason it does not have an architectural character that is in keeping with the contributing features of the Memorial-Park.

Casket Warehouse (1951, moved 1958). The building, though representing the full-service aspect of the Forest Lawn Memorial-Park—Hollywood Hills property, is hidden from the view of visitors and guests and was not intended to be considered a part of the Memorial-Park's designed historic landscape. For this reason it does not have an architectural character that is in keeping with the contributing features of the Memorial-Park.

d. Nearby Historic Resources – Griffith Park

The Project Site borders Griffith Park to the south and east. Griffith Park is a 4,218-acre City park located within the eastern edge of the Santa Monica Mountains, northwest of downtown Los Angeles. Most of Griffith Park was originally donated to the City by Colonel Griffith J. Griffith in 1896. The park boundaries include Griffith's original donation, as well as some portions adjacent to the Forest Lawn property, which were deeded to the City by Forest Lawn in 1987 and 2003. The park is largely comprised of wilderness area, which can be traversed by a network of hiking/equestrian trails and limited access roads.

On January 27, 2009, the Los Angeles City Council formally adopted the designation of Griffith Park as a Historic-Cultural Monument under Criteria 1 through 4. Specifically, the following findings were made:

1) The subject property "embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for study of a period style or method of

construction" for its numerous buildings and structures representing various architectural styles including Spanish Colonial Revival, Moderne, Second Greek Revival, and the "Park Style."

2) The subject property reflects the "broad cultural, economic, or social history of the nation, State or community" for its association with the growth and development of the City of Los Angeles from a small city to a major metropolitan area.

3) The subject property is identified with several historic personages such as the original owner of the subject area, Jose Vincente Feliz; the original donors of parkland, Griffith J. Griffith and his wife; and Walt Disney, who donated buildings and structures to the site.

4) The subject property is identified with "important events in the main currents of national, State, or local history" for the original donation of parkland by Griffith J. Griffith on December 16th, 1896 as a "Christmas gift" to the City of Los Angeles.

There are 36 defined historically sensitive resources within Griffith Park, with most of the historic resources located on the eastern and southern regions of the park. The City considers the wilderness a historically sensitive resource.

3. Environmental Impacts

a. Methodology

In order to identify and evaluate potential historic resources located within the Project Site, a multi-step methodology was used. Record searches to identify previously documented historic resources were conducted and previous evaluations were reviewed. A survey of the developed portions of the Project Site, including photography and background research, was made to document existing conditions, assess the Project Site's eligibility as a designed historic landscape, and identify contributing features of the designed historic landscape. The findings of this survey were documented in the *Historical Resources Assessment, Forest Lawn Memorial-Park - Hollywood Hills*. National Register, California Register, and the local city criteria were employed to assess the significance of contributing features, including those criteria related to designed historic landscapes. In addition, an analysis of potential project impacts on historic resources within Griffith Park was also prepared based on review of the Historic-Cultural Monument nomination for Griffith Park, evaluation of the proposed Project, and a survey of Griffith Park areas adjacent to the Project Site.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a screening question that addresses impacts with regard to historic resources. This question asks whether the project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.

Section 15064.5(b) of the CEQA Guidelines states that a project involves a "substantial adverse change in the significance of a historical resource" when one or more of the following occurs:

1. Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

2. The significance of a historical resource is materially impaired when a project results in any of the following:

    - o Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources.

    - o Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.

    - o Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

In the context of these questions from the CEQA Guidelines, the *City of Los Angeles. CEQA Thresholds Guide*, states that a project would normally have a significant impact on historical resources if it would result in a substantial adverse change in the

significance of an historical resource. A substantial adverse change in significance occurs if the project involves:

- Demolition of a significant resource;
- Relocation that does not maintain the integrity and significance of a significant resource;
- Conversion, rehabilitation, or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
- Construction that reduces the integrity or significance of important resources on the site or in the vicinity.

A substantial adverse change requires a material impairment of a resource. In essence, according to CEQA Guidelines Section 15064.5(b), a resource is materially impaired when an action would render the resource no longer significant or eligible for designation.

(1) Evaluation of Historic Significance

The developed portion of the Forest Lawn Memorial-Park—Hollywood Hills property appears potentially eligible for listing in the California Register under Criterion 3 at the local level as a designed historic landscape because it is a significant example of the work of Hubert Eaton, who is broadly recognized as the creator of the modern memorial park. Eaton's vision of the memorial park embodied bold changes to American cemetery design, altering the type's physical landscape, thematic associations, and practical capabilities to suit the emerging popular culture of the 20th century.

The developed portion of the Forest Lawn Memorial-Park – Hollywood Hills property appears potentially eligible for designation as a City of Los Angeles Historic Cultural Monument because it is a notable work of a master designer, Hubert Eaton, whose individual genius influenced his age.

On an individual basis, none of the contributing features are themselves eligible for inclusion on the California Register, or for designation as a Los Angeles Historic Cultural Monument. Together, they represent the work of Hubert Eaton within the context of the Forest Lawn Memorial-Park - Hollywood Hills property as a designed historic landscape and have no historic event or personal associations, architectural distinction, or potential to yield important information outside of their collective contribution to the developed portion of the Forest Lawn Memorial-Park – Hollywood Hills property. Moreover, Eaton's design

for the Forest Lawn Memorial-Park – Hollywood Hills property went beyond any one feature in the landscape. While some features may be better than others at representing Eaton's creative vision, none of the features alone convey Eaton's vision for the Forest Lawn Memorial-Park – Hollywood Hills property.

c. Project Impacts

The Project would construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. As part of the Project, two maintenance buildings identified as contributing features of secondary significance would be removed. These buildings include the Maintenance Office and Maintenance Garage, both constructed in 1955.

As mentioned above, the developed portion of the Forest Lawn property appears to be potentially eligible for designation as a designed historic landscape. The proposed Project, which would expand the cemetery facilities within the undeveloped portions of the Project Site, and include the continued development of interment sites within the existing Memorial-Park, is consistent with the historic use and would not affect the significance of the developed portion of the Memorial-Park – Hollywood Hills property. The Project, including the potential demolition of two contributing features of secondary significance in the maintenance area, would not affect the eligibility of the Memorial-Park for listing. The Project does not involve the demolition, relocation, or conversion of a significant contributing feature. Further, development of the Project would not reduce the integrity or significance of contributing features on the Project Site or important resources in the vicinity. Thus, the Project would not result in a substantial adverse change in the significance of an historical resource. Therefore, the Project would not result in significant impacts with respect to historical resources.

The potential demolition of the Maintenance Office and Maintenance Garage, located within the maintenance area and identified as contributing features of secondary significance above, would not "materially impact" the Memorial-Park such that their demolition would threaten the Memorial-Park's apparent eligibility for California Register listing, or eligibility for Los Angeles Historic Cultural Monument listing. While these structures were constructed during Forest Lawn's period of significance (1951-1966) and have historical associations with Hubert Eaton, they are of secondary significance in the context of the Memorial-Park as a designed historic landscape. These maintenance features are separated from the landscaped area of the Memorial-Park and were

historically screened from public view through changes in topography and dense landscaping. Continued preservation of the Memorial-Park and its primary contributing features may necessitate changes to the support and maintenance buildings that enable the property's historic use to continue. Accordingly, the developed portion of the Forest Lawn Memorial-Park – Hollywood Hills property would remain eligible for California Register listing with implementation of the proposed Project, which includes the potential demolition of two contributing features of secondary significance. Therefore, the proposed Project would not have a significant adverse impact on the potentially eligible developed portions of the Memorial Park, nor would it result in significant impacts with respect to any historic resource under CEQA.

In addition, as discussed in detail in the *Impact Assessment* prepared by LSA, the proposed Project would not have a significant impact on the historic resources of the adjacent Griffith Park. Specifically, while development within the East Area of the Project Site would somewhat affect the setting of the westernmost portion of Griffith Park and development of the retention basins would also affect the wilderness area of the park, the proposed Project would not significantly alter character-defining features that justify Griffith Park's inclusion in the California Register or designation as an HCM. Besides the wilderness area, the closest historically sensitive resources within Griffith Park are approximately one-third of a mile away from the Project Site (e.g., Travel Town, the "Little Nugget" railcar, and the Hollywood sign) and these resources are separated from the Project Site by changes in topography and adjacent development.

The wilderness area is a historically sensitive resource; however development of the East Area and the retention basins would have an impact on a relatively small portion of the wilderness area. Furthermore, the setting of this portion of the wilderness area has been directly impacted by development in Griffith Park itself. In addition, a portion of the wilderness area was deeded to Griffith Park by Forest Lawn in 1987 and 2003, long after Griffith Park's period of significance. Although the HCM nomination specifically calls out some views in its description of the Griffith Park, there is no mention of viewsheds near the property line within Forest Lawn, which suggests that views from this area are not considered particularly character-defining for the park as a whole.

Based on the above, the Project would not result in significant impacts to on-site historic resources or historic resources within Griffith Park.

4. Cumulative Impacts

The analysis of cumulative impacts to historic resources is based on whether impacts of the proposed Project and related projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar context or property

type. Impacts to historic resources tend to be site-specific. Specifically, cumulative impacts would involve projects affecting local resources with the same level or type of designation or evaluation, projects affecting other structures located within the same National Register District, or projects that involve resources that are significant within the same context as resources associated with the proposed Project. The known related projects would not impact historic resources of the same character (based on context, building type, evaluation, and designation) as those that are present within the Project Site. In addition, due to the identification of the potentially eligible designed historic landscape within the Project Site and the distance of the related projects to this potential resource, related projects are not anticipated to impact this resource. Therefore, cumulative impacts on historic resources are anticipated to be less than significant.

5. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to historic resources. Nonetheless, the following measure is recommended to further reduce any potential impacts:

Mitigation Measure D.1-1 If demolition of one or more of the two contributing features of secondary significance in the maintenance area occurs, then each building that is proposed for demolition should be documented by an architectural historian meeting the Secretary of the Interior's Professional Qualification Standards in a manner that is similar to Level III of the Historic American Building Survey (HABS). The documentation shall consist of the following:

- 35mm archival quality black and white photographs of all exterior elevations, interior views, character-defining features, and context views;
- Site plan showing the view of photographs and building footprint;
- If available, copies of elevation drawings, floor plans, measured drawings, historic photographs, and newspaper articles; and
- Written data discussing the history and development of the property. The current report will satisfy some of the requirements for the written data.

6. Level of Significance After Mitigation

The proposed Project's impacts to historical resources would be less than significant without mitigation. Implementation of the listed mitigation measure would further reduce any potential impacts.

IV. Environmental Impact Analysis

D.2 Cultural Resources – Archaeological and Paleontological Resources

1. Introduction

The following section addresses potential impacts associated with archeological and paleontological resources. This section is based in part on the findings and conclusions of the *Cultural Resources Assessment for the Forest Lawn Memorial-Park - Hollywood Hills, City of Los Angeles, Los Angeles County, California,* prepared by LSA Associates, Inc., dated January 2009. The Cultural Resources Assessment addresses the undeveloped portions of the Project Site and is provided in Appendix D-3 to this Draft EIR.

2. Environmental Setting

a. Existing Regulatory Framework

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), National Historic Preservation Act, and the California Environmental Quality Act (CEQA) are the basic federal and state laws governing preservation of historic and archaeological resources of national, regional, State and local significance. As archaeological resources are also considered historic, regulations applicable to historic resources are also applicable to archaeological resources and are discussed and analyzed in this section.

(1) Federal

(a) National Historic Preservation Act

Enacted in 1966, the National Historic Preservation Act (NHPA) is the principal Federal law dealing with historic preservation. The NHPA establishes a program for the preservation of additional historic properties throughout the nation, and for other purposes. The NHPA expressly authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places (National Register) composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Eligibility for listing in the National Register is determined for

districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and: (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) are associated with the lives of persons significant in our past; or (c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (d) have yielded, or may be likely to yield, information important in prehistory or history.

(2) State

(a) California CEQA and California Register of Historic Places

State archaeological regulations affecting this Project include the statutes and guidelines contained in CEQA (California Public Resources Code (PRC) Sections 21083.2 and 21084.1) and the CEQA Guidelines (California Code of Regulations (CCR) Title 14, Section 15064.5). CEQA requires lead agencies to carefully consider the potential effects of a project on archaeological resources. CEQA recognizes that archaeological resources are part of the environment, and a project that "may cause a substantial adverse change in the significance of an historical resource [including archaeological resources] is a project that may have a significant effect on the environment" (P.R.C. Section 21084.1). For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the California Register of Historic Resources (P.R.C. Section 21084.1).

A resource is eligible for listing in the California Register of Historic Resources and considered a "historical resource" under CEQA if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history [CEQA Guidelines Section 15064.5(a)(3)].

Archaeologists assess archeological sites based on all four criteria but usually focus on the fourth criterion, above. The CCR also provides that cultural resources of local

significance are eligible for listing in the California Register of Historic Resources (CCR Title 14, Section 4852).

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of the PRC and Section 15064.5 of the CEQA Guidelines described above apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site is to be treated in accordance with the provisions of PRC Section 21083.2, which refer to a unique archaeological resource. As used in CEQA, "a unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person [PRC Section 21083.2(g)].

In addition to having significance, resources must have integrity for the period of significance. The "period of significance" is the date or span of time within which notable events transpired at a site, or the period that notable individuals made their important contributions to a site. Integrity is the ability of that property to convey its significance.

CEQA requires the lead agency to: consider whether the project would have a significant effect on unique archaeological resources or resources eligible for listing in the California Register of Historic Resources, and to avoid these resources when feasible or to mitigate any effects to less than significant levels (PRC Sections 21083.2 and 21084.1). The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. (CEQA Guidelines §15064.5(c)(4)).

Paleontological resources are also afforded protection by environmental legislation set forth under CEQA. Appendix G (part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, stating that "a project will normally result in a significant impact on the environment if it will …disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the PRC specifies that any unauthorized removal of

paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources.

(3) Local

(a) City of Los Angeles General Plan

The City of Los Angeles guidelines for the protection of archaeological resources are specified in Section 3 of the City of Los Angeles General Plan Conservation Element. As stated therein, it is the policy of the City of Los Angeles that the City's archaeological resources be protected for research and/or educational purposes. Section 5 of the City of Los Angeles General Plan Conservation Element recognizes the City's responsibility for identifying and protecting its cultural and historical heritage. The Conservation Element establishes the policy to continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition or property modification activities, with the related objective to protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.

(4) Native American Consultation

Government Code Section 65352.3 (Senate Bill [SB] 18) requires local governments to consult with California Native American tribes identified by the California Native American Heritage Commission (NAHC) prior to the adoption or amendment of a general plan or specific plan. The State Office of Planning and Research's technical advice series recommends that agencies solicit the concerns of Native Americans and other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associates and societies as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of the antiquity, and provides for the sensitive treatment and disposition of those remains.

b. Cultural Setting

(1) Prehistoric Setting

Southern California researchers have used changing artifact assemblages and evolving ecological adaptations to divide regional prehistory into four stages: the Early Period, the Milling Stone Period, the Intermediate Period and the Late Period.

(a) Early Period (pre-6000 BC)

The Early Period (also known as the Hunting Period) covers the interval from the first presence of humans in Southern California until postglacial times (5500 to 6000 BC). Artifacts and cultural activities from this period represent a predominantly hunting culture; diagnostic artifacts include extremely large, often fluted bifaces associated with the use of the spear and the atlatl. In Southern California, important Early Period sites have been found near prehistoric Lake Mojave and along the San Dieguito River.

(b) Milling Stone Period (6000-3000 BC)

The transition from the Early Period to the Milling Stone Period is marked by an increased emphasis on the processing of seeds and edible plants and is estimated to have occurred between 6000 BC and 3000 BC. Milling Stone Period settlements were larger and were occupied for longer periods of time than those of the Early Period, and mortuary practices included both flexed and extended burials as well as reburials. Diagnostic artifacts recovered from Milling Stone Period archaeological sites include metates, manos, large projectile points indicating the continued use of darts and atlatls, discoidals and cogged stones.

(c) Intermediate Period (3000 BC-AD 500)

Approximately 3000 BC, coastal populations began relying more on marine resources, as evidenced by circular shell fishhooks, which first appeared at coastal sites in this period. Further inland, populations centered around pluvial lakes created by runoff from melting glaciers. Intermediate Period sites are characterized by the appearance of the mortar and pestle, and small projectile points. The use of the mortar and pestle may indicate an increased reliance on acorns as a food source, while the small projectile points suggest that the bow and arrow were in limited use. Intermediate Period burials were generally by interment in a flexed position, face down, although a site at Big Tujunga Wash in the San Fernando Valley contained both reburials under stone cairns and cremations.

(d) Late Period (AD 500-1769)

The Late Period witnessed a number of important cultural developments in Southern California, including the concentration of larger populations in settlements and communities, greater utilization of the available food resources, and the development of regional subcultures. Cremation was the preferred method of burial during the Late Period, and elaborate mortuary customs with abundant grave goods were common. Other cultural traits diagnostic of the Late Period include increased use of the bow and arrow, steatite containers, circular shell fishhooks, asphaltum (as an adhesive), bone tools, and personal ornaments of bone, shell, and stone. Obsidian from Obsidian Buttes near the Salton Sea was used sporadically in the manufacture of lithic artifacts until sometime after AD 1000,

when its use in the Los Angeles Basin became much more common. A number of the cultural elements found in Southern California during the Late Period have been linked to the migration of Uto-Aztecan speaking peoples from the Great Basin; these traits include the manufacture of ceramics, the use of small triangular arrow points, and interment by cremation. The date of the Uto-Aztecan migration has been dated as early as 2000 BC and as late as AD 700.

c. Ethnographic Setting

The Late Prehistoric Period ended abruptly when Franciscan friars and Spanish soldiers began establishing mission outposts along the California coast. The San Fernando Valley area was then occupied by two different groups: the Gabrielino and the Chumash Indians.

The Project Site, located within the foothills of the Santa Monica Mountains, is situated in a border area close to villages of two different groups and utilized by both the Gabrielino and the Chumash. Gabrielino villages known to have been situated in the San Fernando Valley include Totogna and Topangna, located near the southwestern edge of the valley and near the Project area. Huwam, located near the western edge of the San Fernando Valley, is the closest known Chumash village to the Project area.

(1) The Gabrielino Indians

The Gabrielino were hunters and gatherers who used both inland and coastal food resources. Gabrielino living within the San Fernando Valley generally located their campsites and villages near the few water sources the valley provided such as around the creeks and drainages found in the canyons, the perennial water source near Cahuenga Pass, or the Big Tujunga River. In addition to permanent settlements, the Gabrielino occupied temporary campsites used seasonally for hunting, fishing, and gathering plant foods and shellfish. Gabrielino villages generally contained populations with 50-100 inhabitants, although larger communities may have existed. These communities were the focus of family life. Villages were united under the leadership of a tomyaar, or chief, who inherited his position from his father. Shamans also played an important role in Gabrielino society, serving as the principal doctors, therapists, philosophers, and intellectuals; often, the tomyaar himself was an important and influential shaman. Gabrielino culture was characterized by an active and elaborate system of rituals and ceremonies.

Gabrielino territory included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers, several smaller intermittent streams in the Santa Monica and Santa Ana Mountains, all of the Los Angeles Basin, the coast from Aliso Creek north to a point

between Topanga and Malibu Creeks, and the islands of San Clemente, San Nicolas, and Santa Catalina.

(2) The Chumash Indians

Although the Chumash were first observed by 17th century European explorers as living along the coast, smaller groups of Chumash also occupied inland areas. Within the San Fernando Valley, the Chumash generally occupied the western and southwestern foothills, including the Santa Monica Mountain foothills. The Chumash village consisted of a main settlement and multiple surrounding seasonal camps, processing areas, and resource acquisition areas. Each village had one chief whose position was inherited patrilineally. The greatest power, however, rested with the community shamans.

A typical Chumash village consisted of several hemispherical houses, a sweathouse, storehouses, a ceremonial enclosure, and a gaming area. The Chumash manufactured cooking utensils (e.g., bowls, cooking plates) and ritual objects out of steatite quarried on Santa Catalina Island. The islands off the coast of California were accessed with plank canoes called tomol. For hunting, the Chumash used the bow and arrow. The rock paintings of the Chumash are some of the most spectacular in the United States and can be found throughout Chumash territory.

Chumash occupied territory from San Luis Obispo to Malibu Canyon along the coast, inland areas as far east as the western edge of San Joaquin Hills, the Santa Monica Mountains, and the Santa Barbara Channel Islands.

d. Historic Setting

(1) Spanish Mission Period (1769-1821)

In 1542, Juan Rodriguez Cabrillo explored the California coast by ship. Although the Cabrillo expedition, the first European exploration of Southern California, anchored ships near present day Santa Monica during its voyage, it was not until August 5, 1769, when Gaspar de Portola's expedition to Monterey passed through the San Fernando Valley that Europeans first recorded the area. Father Juan Crespi, the expedition's spiritual advisor, called it de Valle de Santa Catalina de Bononia de los Encinos. Father Fermín de Lasuén established the first Franciscan mission in the Valley, Mission San Fernando Rey de España, on September 8, 1797, which consisted of a cross and a small arbor that acted as a temporary church.

In 1795, the San Fernando Valley was divided into two large ranchos, El Encino Rancho, which was deeded to Francisco Reyes, and San Rafael Rancho, which was

deeded to Jose Maria Verdugo. Ultimately, the land for the El Encino Rancho was given to the San Fernando Mission, and Reyes was given land elsewhere.

Ultimately, Spanish colonization resulted in the destruction of both the Gabrielino and the Chumash society and culture. Two important factors that contributed to this decline were (1) the removal of the youngest, healthiest, and most productive Indians from their traditional communities and their incorporation into the Mission system, and (2) introduction of highly infectious diseases, eventually leading to epidemics and reduced birth rates. As a result, the traditional Indian communities were depopulated and the survivors integrated into local Mexican-American communities. Several Gabrielino groups still live in the Los Angeles area today, while the current Chumash population is spread throughout Southern California, with one reservation at Santa Ynez in Santa Barbara County.

(2) Mexican Rancho Period (1821-1848)

In 1821, Mexico gained independence from Spain and, in 1848, the United States formally obtained California in the Treaty of Guadalupe Hidalgo. It was during this period that large tracts of land termed ranchos were granted by the various Mexican Governors of Alta California, usually to individuals who had worked in the service of the Mexican government. During this time, the two ranchos that comprised the San Fernando Valley were broken into several smaller ranchos. In 1843, the El Providencia Rancho No. 424 (4,064 acres, or one square league) was granted to Jose Castro, Luis Arenas, and Vincente de la Osa by Governor Micheltorena. De la Osa retained sole ownership of the rancho.

(3) American Period (post-1848)

Following the end of hostilities between Mexico and the United States in January of 1847, the United States officially obtained California from Mexico through the Treaty of Guadalupe Hidalgo on February 2, 1848. In 1850, California was accepted into the Union of the United States.

The cattle industry in California reached its greatest prosperity during the first years of the American Period. More people began moving into the San Fernando Valley. However, unprecedented floods in 1861-1862 were followed by two years of drought, which was a turning point in the economic history of Southern California. The era of the great cattle ranchos ended, and many of the landowners who survived the collapse of the cattle industry were forced to sell their property due to the drought. In 1867, El Rancho Providencia was purchased by Dr. David Burbank, a dentist from New Hampshire who wanted to raise sheep and grow wheat.

Southern California's economic transition continued through the 1870s. Rancho Providencia became the principal source of grain for the San Fernando Valley and for Los Angeles during this time, and in 1874, the Southern Pacific Railroad began running through the Valley. Although Rancho Providencia was one of only four locations with water in the Valley, by 1886, drought spurred Burbank to sell his 9,000 acres to the Providencia Land and Water Development Company. By the early 1900s, Rancho Providencia had shrunk to 1,000 acres and was better known as the Providencia Ranch.

In the early 1900s, movie makers such as D.W. Griffith and Cecil B. DeMille took advantage of the open, western-looking terrain and predictably sunny weather of the San Fernando Valley to film several movies. Valleywood, as some would nickname the San Fernando Valley, played a critical role in the development of the Hollywood movie industry. By January of 1915, 50 studios in and around Los Angeles were producing feature films.

(4) W.I. Hollingsworth and Company Property

By the early 1900s, the real estate company, W.I. Hollingsworth and Company, had acquired large portions of the Providencia Ranch, including a large portion of what is now the Project Site. After Jesse Lasky leased the Providencia Ranch in 1914, Providencia Ranch became more commonly known as the Lasky Ranch. Lasky leased the ranch to film big scenes and maintained a stock farm.

Lasky's lease expired around the late 1920s, and the old Lasky Ranch reverted to W.I. Hollingsworth and Company interests. Warner Brothers leased the 1,000-acre old Lasky Ranch in 1929 from W.I. Hollingsworth and Company and by 1930, the Lasky Ranch had been in almost constant demand by studios for nearly 20 years. Films made at the Lasky Ranch include many of Cecile B. DeMille's early films; D.W. Griffith's *The Birth of a Nation*; *All Quiet on the Western Front*; several of Charlie Chaplin's early comedies, including *Sunnyside*; and many of W.C. Fields' early comedies such as *It's a Gift*.

By the mid-1920s, the ranch manager's residence, a ranch house, a shed, and a barn with corrals had been built on a portion of the Providencia Ranch within the current boundaries of the Project Site. Ernest G. Carter, the ranch manager for W.I. Hollingsworth and Company, lived on the property with his wife, Ramona. Carter eventually became a vice president at W.I. Hollingsworth and Company and moved off the property a few years after Forest Lawn purchased it.

By the mid-1930s, the old Lasky Ranch consisted of approximately 500 acres. The majority of the property was still owned by W.I. Hollingsworth and Company and included approximately 300 acres of the current Project Site. Several buildings were constructed on the property during the 1930s and early 1940s to serve the movie industry. By 1945, the

ranch consisted of all the original buildings, two additional residences, a water tank, an additional barn, two additional sheds, a blacksmith shop, two offices, a clubhouse, a saddle house, an oil station, and two movie sets.

After the departure of Warner Brothers, the old Lasky Ranch was leased to the Hudkins brothers. The Hudkins Stables Riding Academy, also known as the Hudkins Brothers Movie Ranch, supplied horses, wagons, and gear to the movie industry and provided riding instruction for San Fernando Valley residents. During the early 1930s, a track (the Lasky Park track) was created on the ranch. A pump house and several stables were associated with this track. The Los Angeles Polo Club as well as much of the polo crowd in Hollywood used the infield for matches, and races were run on the track.

By 1946, the remaining open acres of the Providencia Ranch (old Lasky Ranch or Hudkins Ranch) property had been purchased by Forest Lawn to create a memorial-park similar to the existing Forest Lawn Memorial-Park in Glendale. Construction of the memorial-park did not begin immediately after the land purchase, while Forest Lawn obtained a Conditional Use Permit (CUP) to operate the property as a cemetery. The Hudkins brothers remained on the Hudkins Ranch until the late 1940s.

(5) Mack Sennett Property

In 1918, Mack Sennett became the largest private landowner in Los Angeles when he purchased 500 acres of property, including 304 acres of what is now Griffith Park. Approximately 150 acres of this purchase were located within the Providencia Ranch and within the boundaries of the current Project Site. Sennett envisioned building a mansion atop Mount Sennett, now known as Mount Lee. Sennett removed 69 feet from the top of Mount Sennett to create a suitable house pad for his mansion. By 1926, the house pad was almost complete. However, Sennett lost approximately $5 million in the stock market crash of 1929 and by 1934, Sennett was bankrupt; the full-sized house was never built. Sennett's property in Los Angeles was sold at a tax sale in the late 1930s. Although Sennett's property included a house built circa 1916 and an adjacent circa 1925 barn, built during the time he owned the land, there is no mention of the house or barn in the Sennett autobiography. By 1941, all of the former Mack Sennett property within the current Project Site boundaries had been sold to private individuals, Edward (Bud) Furer and K.O. Anderson. Edward Furer was the son of a Swiss immigrant and owner of the Acme Tool and Manufacturing Company. Eben Coe, who acquired K.O. Anderson's acreage, was an actor and singer in the 1920s and 1930s.

e. Local and Site Conditions

(1) Geology and Geomorphology

The Project Site lies in the foothills of the Santa Monica Mountains within the City of Los Angeles. The Santa Monica Mountains are part of the Transverse Range, which extends 350 miles east to west from San Bernardino County to the Pacific Ocean. Specifically, the Santa Monica Mountains fall within the western segment of the Transverse Range and consist of two major east-trending uplifts separated by a tectonic depression. The topography of the Project Site is rolling hills. The Project Site includes currently undeveloped areas of the Forest Lawn Memorial-Park – Hollywood Hills property within the foothills of the Santa Monica Mountains, at the southern end of the San Fernando Valley. Portions of the Project Site are associated with Sennett Canyon. Sennett Creek flows in a north-south direction through the Forest Lawn Memorial-Park – Hollywood Hills property. Geologically, this area is composed of Middle Miocene Formation marine sedimentary rocks. To the north of this is Recent Alluvium and to the south Mesozoic Granitic Rocks.

f. Records Search

A cultural resources records search was conducted by LSA Associates, Inc. at the South Central Coastal Information Center (SCCIC), located at California State University Fullerton. It included a review of all recorded historic archaeological sites and architectural resources as well as all known cultural resource survey and excavation reports within a 0.5-mile radius of the Project area. In addition, LSA examined the National Register, the California Register, California Historical Landmarks, and California Points of Historical Interest. The Historic Properties Directory (2005) maintained by the State Office of Historic Preservation was also inspected for addresses within the Project area.

Based on the findings of the cultural resources records search, the address of the Project Site is listed in the Historic Properties Directory; however, the site description refers to the original Forest Lawn Memorial-Park and Mortuary in Glendale, which opened in 1906. No other previously recorded cultural resources were identified within the Project Site or within 0.5 mile of the Project Site.

g. Archival Research

Archival research was conducted by an LSA archaeologist. Research methodology focused on the review of a variety of primary and secondary source materials relating to the history and development of the Project area. Sources included but were not limited to historic maps, aerial photographs, City directories, County assessor's maps, and written histories of the area. A magnification analysis of the historic aerials was conducted to ascertain build dates of historic resources. A detailed list of repositories, publications, and

individuals that were contacted regarding the historical land uses and the locations of research materials pertinent to the Project Site is contained in Appendix D-3 to this Draft EIR.

h. Recent History of the Forest Lawn Memorial-Park - Hollywood Hills Property

A review of historic maps and aerials shows three different houses as well as associated outbuildings that were constructed within the Project Site more than 50 years ago.

The first building constructed within the project area first appears on the USGS 1921 Santa Monica, California 15-minute topographic map. A 1916 building improvement, listed in the current information for the parcel on which this building is located, is likely associated with this building. The owner of the property and the builder of the house are unknown, as Los Angeles County Assessor's records are unavailable for this property until 1924. However, Mack Sennett acquired this property in 1918, as discussed above, had planned to construct a mansion on top of Mount Sennett (now Mount Lee), and had completed the grading of a road and a house pad, which was never built. Several roads are visible on the 1928 aerial in the vicinity of the house and into and out of Griffith Park. It is not clear whether Sennett ever occupied the house on his property. However, Los Angeles County Assessor's records show building improvements to the property in 1925, a second building near the first appears on the 1926 topographic map, and historic aerials show this second structure is a barn, so the house appears to have been occupied during this time.

By 1934, Sennett was bankrupt and the acreage was divided and sold at a tax sale to two parties, Edward (Bud) Furer and K.O. Anderson. Edward Furer owned the majority of the acreage, approximately 125 acres, including the circa 1916 house.

Between 1941 and 1945, a second house was built in proximity to the circa 1916 house. This house was a large residence with a pool and included a pump house, a generator house, and a feed room. Although this house was erected on the property owned by K.O. Anderson from 1941 to 1943 and Eben Coe from 1943 to 1945, it is unclear which individual built and occupied it, as no building permits were found for this building and no directory listings were found for any residents of this building. By 1946, Forest Lawn had acquired approximately 490 acres on the Rancho Providencia and Scott tract, Tract 17266.

In 1947, Bud Furer constructed a new residence and an adjacent garage on the property. The redwood and brick residence measured approximately 1,000 square feet, had a copper roof, and was completed in 1949. By 1948, Bud Furer had also constructed a

third barn on his ranch. By 1948, the Furer Ranch consisted of three residences, three barns, corrals, a chicken house, a garage, a generator house, a pump house, and a feed room.

The Forest Lawn Memorial-Park - Hollywood Hills opened in 1952. The Furers remained in residence into the mid-1960s, per an agreement with Forest Lawn. It is unclear which house the Furers occupied—the early 1940s house or the 1947 house. The circa 1916 house and the smaller barn and chicken house were removed by 1965, presumably for the building of the Hall of Liberty. By 1968, the barn built by Bud Furer had been removed. The circa 1925 barn was removed by 1982, and the 1947 Furer house is no longer visible on the aerial, although the garage is visible. The early 1940s house was removed in 1991, as it was in an extreme state of disrepair. None of the Furer Ranch buildings are visible in a circa 2000 aerial photograph.

i. Current Land Use

The majority of the area surveyed for cultural resources within the Project Site is undeveloped. Portions of the undeveloped areas of the Project Site appear to have been graded for storage of soil removed during preparation of interment spaces, a 1990s YMCA camp, and surface mining activities that occurred between the 1960s and 1990s.

j. Fieldwork

A systematic pedestrian cultural resource survey was conducted by an LSA archaeologist and architectural historian. Located in the foothills of the Santa Monica Mountains, the majority of the undeveloped portion of the Project Site is typified by oak- and brush-covered slopes. Sennett Creek bisects the Project Site, and vegetation around the creek is thick with poison oak, reeds, and grasses. The remainder of the Project area is typified by narrow ridgelines with steep slopes.

The pedestrian survey was unable to locate physical manifestations of the Furer houses and barns that were identified during archival research. Portions of the Project Site appear to have been graded for storage of soil removed during preparation of interment spaces, a circa 1990s YMCA camp, and modern mining activities.

One cultural resource, discussed below, was located during the pedestrian survey.

(1) Archaeological Resources Observed

This site is the remnants of a water conveyance system, the remnant of two roads, part of a cobble and mortar wall, a graded pad, and two bridges. The water conveyance

system consists of five features: two pumps, a wall lining the creek, a water line, and a spigot with a valve. The water conveyance system is located primarily within Sennett Canyon along the creek. The ten features are described in further detail below.

- **Features 1 and 2.** Features 1 and 2 are bridges that span the small creek that bisects the Project Site. Feature 1 is a continuous span simple deck beam wooden pedestrian bridge that measures 14.5 feet long. The deck is constructed of 6-inch-wide wooden floor beams nailed to wood post support beams. The footings consist of four wooden posts sunk into the banks of the creek and nailed to the other posts that span the creek. The remains of a square pagoda-style arch are built on one side of the bridge and measure 8 feet tall. Feature 2 is a 21-foot-long closed spandrel deck arch bridge constructed of concrete and cobbles. The arches have been faced with concrete. The deck is made of wooden 6-inch-wide wooden floor beams nailed to wood post support beams that span the creek and are set in concrete footings on either side of the creek. The construction and size of this bridge appear to be suitable for vehicular traffic.

- These two bridges appear to have provided access to the Edward Furer house. Both bridges are in very poor condition. Support braces for the wooden bridge have fallen from the bridge and are lying at the bottom of the creek. The posts sunk into the bank of the creek are shaky. The concrete bridge has no integrity left. The supports for this bridge are in differing states of disrepair, and the planks are mostly gone, leaving only the concrete supports and wooden support beams.

- **Feature 3.** The third feature is a pump motor. The motor is sunk into the ground with an attached metal pipe that runs into the ground. The pump appears to have been manufactured by the A.O. Smith Corporation, and the Smithway models of electric motors from this company were not manufactured until 1940, when A.O. Smith purchased Sawyer Electric Manufacturing Company. The pump does not appear functional.

- **Feature 4.** The fourth feature is a spigot located on the opposite side of the creek from the pump motor. The spigot emerges from a drilled hole in a rock along the creek and extends approximately six inches from the rock. A screw valve is located on the top of the spigot to open and close the spigot. There is a joint on the end of the pipe, and the pipe appears to have been filled in.

- **Feature 5.** This feature is a cobble and mortar wall located on the northern bank of the creek. The wall is approximately 20 inches tall and the visible portion is approximately 40 feet long. Individual cobbles measure 3 to 10 inches in diameter and are stacked three courses high. The wall averages 9 inches wide, depending on the size of the cobbles. The portion of the wall remaining appears to be in fair condition. The function of this wall is unclear; it is possible that the wall stabilized the bank of the creek.

- **Feature 6.** This feature consists of a small graded pad that measures 100 x 100 feet. This pad is located along a ridge and connects to a graded access road. The pad is visible on the 1928 aerial and appears to be associated with the circa 1916 house. One historic ceramic kettle was observed in association with this pad. Based on a magnification analysis of historic aerials, commencing with the 1928 aerial, nothing appears to have ever been erected at this site. It is possible that this pad was intended for a water reservoir or a small residence.

- **Feature 7.** Feature 7 is the remnant of a graded dirt road and adjoining cemented cobble wall. The wall measures approximately 50 feet long and stands two to three courses high. The wall is approximately 1 foot thick. Each of the cobbles measures approximately 3.94 to 7.87 inches (in). The wall represents a road border. The road appears to have been used for automobiles, as it is 8 feet wide and partially paved with asphalt and gravel. This road appears to have provided access to the 1947 Furer house.

- **Feature 8.** Feature 8 is a second pump. The pump appears to be circa 1940 and is likely another part of the overall water conveyance feature related to the Furer Ranch. The pump does not appear to function any longer.

- **Feature 9.** Feature 9 is a second section of road. This section is an unpaved road segment that has been cut into the hillside and measures approximately 300 x 6 feet. This road segment is associated with the pedestrian and vehicular bridges and is likely related to accessing the 1947 Furer house.

- **Feature 10.** Feature 10 is a section of 2-inch-diameter metal water pipe running along a small drainage from Feature 9 (a water pump) to where it daylights near the top of the ridge and beyond. This water line is no longer in use. The line is part of the overall water conveyance system related to the Furer Ranch.

- All features appear to be related to the 1940s Furer Ranch, which is no longer extant. As Feature 3, a water pump, was not manufactured before 1940, and the construction methods and materials of these features are consistent with each other and a date in the 1940s, it is likely that the bridges, road, and water conveyance features are related to the period when the Furers occupied the houses and expanded the ranch in the 1940s. The graded pad, which predates the other features as it was created before 1928, still appears to be related to the 1916 house. The roads and bridges appear to be related to access to the houses and the 1948 barn. Since Edward Furer kept horses at his ranch from the 1940s through the 1960s, it is likely that the water conveyance features are related to this endeavor.

3. Environmental Impacts

a. Methodology

A cultural resources records search was conducted to identify known resources within a 0.5-mile radius of the Project Site. The records search included a review of all recorded historic archaeological sites and architectural resources, a review of all known cultural resource survey and excavation reports, and a review of the National Register, the California Register, California Historical Landmarks, and California Points of Historical Interest databases. The findings of this research effort were supplemented by a systematic pedestrian archaeological resource survey of the Project area conducted by an archaeologist and architectural historian. The results of these efforts were included in the *Cultural Resources Assessment for the Forest Lawn Memorial-Park - Hollywood Hills, City of Los Angeles, Los Angeles County, California*. The proposed Project's development was then evaluated for its potential to impact any identified on-site resources.

To address potential impacts associated with paleontological resources, an evaluation of the existing conditions and previous disturbances within the site, the geology of the Project Site and anticipated depths of grading were used to determine the potential for uncovering of such resources.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to cultural resources. These questions are as follows:

Would the project:

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

As mentioned above, archeological resources are often considered historic resources for having yielded, or having the ability to yield, information important in prehistory or history. Section 15064.5(b) of the CEQA Guidelines states that a project involves a "substantial adverse change in the significance of a historical resource" when one or more of the following occurs:

1. Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
2. The significance of a historical resource is materially impaired when a project results in any of the following:
    - o Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register.
    - o Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.
    - o Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

In the context of these questions from the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that a project would normally have a significant impact upon archaeological resources if it could disturb, damage, or degrade an archaeological resource or its setting that is found to be important under the criteria of CEQA because it:

- Is associated with an event or person of recognized importance in California or American prehistory or of recognized scientific importance in prehistory;
- Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;
- Has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods.

With regard to paleontological resources, the *City of Los Angeles CEQA Thresholds Guide*, states that the determination of the significance of paleontological impacts shall be made on a case-by-case basis, considering the following factors:

- Whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a paleontological resource; and
- Whether the paleontological resource is of regional or statewide significance.

Based on these factors, the proposed Project would have a significant impact on paleontological resources, if:

- The proposed Project would result in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.

c. Project Impacts

No prehistoric archeological resources were observed on the Project Site. Further, the historic archeological resources observed are not recommended for listing in the National or California Register. Grading, excavations, and the development of proposed structures, interment sites and other improvements are anticipated to result in the disturbance and grading within an area with the recorded artifacts associated with the Furer Ranch that was developed in the early 1900s, as described above. The ten features recorded are not eligible for listing in the National Register nor in the California Register due to the poor integrity of the water conveyance system, road, wall, and bridges, and because these features do not appear to be related to persons or events important to the development of the San Fernando Valley or to the history of Valleywood. The features are not associated with an event or person of recognized importance. Therefore, the removal of these features would not result in a significant impact to an archaeological resource that is found to be important under the criteria of CEQA and no mitigation measures are required. Nevertheless, because buried remains often go undetected during a pedestrian survey, the build date and builder of the 1916 Furer house are unknown, and the surrounding area is sensitive for historic resources, future expansion and development could impact unknown historic resources. Accordingly, Mitigation Measure IV.D.2-1 and IV.D.2-2 are recommended to reduce impacts to previously unidentified archaeological resources in the unlikely event any such materials are encountered.

With regard to paleontological resources, no paleontological resources are known to exist at the Project Site. In addition, the uppermost soil layers are not likely to contain paleontological resources. However, the proposed Project would result in excavations and grading on previously undisturbed portions of the Project Site and would also result in deeper excavations on previously disturbed portions of the Project Site. As such, the

possibility exists that a subsurface paleontological resource may be found during earth work activities. Accordingly, Mitigation Measure IV.D.2-3 is recommended to reduce impacts to previously unidentified paleontological resources in the unlikely event any such materials are encountered.

The Project Site is not known to contain any buried human remains outside of the designated interment sites within the developed portions of the Forest Lawn Memorial-Park. Pursuant to Government Code Section 65352.3, the Native American Heritage Commission was consulted during the NOP process and did not provide any response to the NOP consultation request. In addition, no recorded Native American burial sites were identified during the cultural resources records search or archival records search or field surveys. Nevertheless, grading and earthwork activities have an inherent potential to disturb previously undiscovered and unknown buried human remains, including those of Native Americans. Accordingly, Mitigation Measure IV.D-4 is recommended to ensure any unanticipated impacts to buried human remains, including those of Native American Indians are mitigated to less-than-significant levels in accordance with the prescribed statutes of State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

4. Cumulative Impacts

The Project in combination with cumulative development could contribute to the progressive loss of undeveloped land, which could potentially contain archaeological resources. Although no previously recorded prehistoric archaeological sites occur on the Project Site or its vicinity, implementation of the recommended mitigation measures regarding the protection of such resources would ensure that potential impacts would be reduced to a less than significant level. Impacts to archaeological and paleontological resources tend to be site specific and are addressed on a site-by-site basis. Similar to the proposed Project, determinations regarding the significance of any cultural resources would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Furthermore, the proposed Project's impacts to cultural resources would be less than significant with the incorporation of mitigation measures. Therefore, the proposed Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be less than significant.

5. Mitigation Measures

The following mitigation measures are recommended to ensure that impacts to yet unknown archaeological and paleontological resources would be mitigated in the unlikely event any resources are encountered during the grading and excavation phase.

Mitigation Measure D.2-1 If any archaeological materials are encountered during the course of the Project development, the Project shall be halted in the area of the discovery. The services of an archaeologist shall be secured by contacting the Center for Public Archaeology - Cal State University Fullerton, or a member of the Society of Professional Archaeologist (SOPA) or a SOPA-qualified archaeologist to assess the resources and evaluate the impact. Copies of the archaeological survey, study or report shall be submitted to the UCLA Archaeological Information Center.

Mitigation Measure D.2-2 The Applicant shall retain a qualified archaeologist to monitor any ground-disturbing activities in the currently undeveloped southeastern portion of the Project Site near the Adolf Furer house location. The monitor shall have the authority to temporarily halt grading operations in the area of the discovery until the resources are properly assessed and subsequent recommendations are determined by the lead agency.

Mitigation Measure D.2-3 If any paleontological materials are encountered during the course of the Project development, work in the area should be halted. The services of a qualified paleontologist shall be secured by contacting the Center for Public Paleontology - USC, UCLA, Cal State Los Angeles, Cal State Long Beach, or the Los Angeles County Natural History Museum, to assess the resources and evaluate the impact. In addition, a report on the paleontological findings shall be prepared by the qualified paleontologist. A copy of the paleontological report shall be submitted to the Los Angeles County Natural History Museum.

Mitigation Measure D.2-4 Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered on-site, no further disturbance shall occur until the Applicant or its contractor contacts the County Coroner and the Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Applicant or its contractor shall notify the County Coroner immediately. If the remains are determined to be Native American, the County Coroner shall notify the Native American Resource Center, which shall then determine and notify a most likely descendant of the deceased. The most likely descendant may inspect the site of the discovery with the permission of the landowner, or his or her authorized representative. The most likely descendant shall complete its inspection within 48 hours of its notification by the Native American Heritage Commission. The most likely descendant may recommend scientific removal and analysis of human remains and items associated with Native American burials.

6. Level of Significance After Mitigation

No known previously recorded pre-historic, archaeological or paleontological resources or human remains have been recorded on the Project Site or in the immediate Project vicinity. Implementation of Mitigation Measures D.2-1 through D.2-4 would reduce any unforeseen project impacts associated with the unlikely discovery or disturbance of any Native American human remains or archaeological and paleontological resources to less than significant levels.

IV. Environmental Impact Analysis

E. Geology/Soils

1. Introduction

This Section addresses geotechnical issues and is based, in part, on the *Geologic and Geotechnical Engineering Review* ("Geotechnical Report") prepared for the Project Site by GeoSoils Consultants Inc., dated April 28, 2008 (see Appendix E to this Draft EIR). This section provides a summary of the analysis completed as part of the Geotechnical Report, which included a review of available literature including site-specific data, and reconnaissance geologic mapping.

2. Environmental Setting

The Project Site encompasses approximately 444 acres situated on the north flank of Cahuenga Peak, south of Forest Lawn Drive and the Mount Sinai Memorial Park, and just above the alluvial plain of the San Fernando Valley. Sennett Creek transects the Project Site from the southeast toward the northwest. The majority of the lower, flatter portions of the Project Site on either side of Sennett Creek are fully developed, except approximately the southeastern one-third of Sennett Creek, which separates the East Area and the Central Area of the Project Site. Refer to Figure II-3 of Section II, Project Description, of this Draft EIR.

a. Geology and Topography of the Project Site

The Project Site is located near the northeastern end of the Santa Monica Mountains. The Project Site occupies the south margin of a small valley that drains north to northwest from Cahuenga Peak toward the Los Angeles River Flood Control Channel. Elevations range from approximately 505 feet above mean sea level (ft MSL) in the northwestern portion of the Project Site to approximately 1,000 ft MSL in the southern portion of the Project Site.

The Santa Monica Mountains define part of the southern edge of the central Transverse Ranges geomorphic province, south of which lies the Peninsular Ranges province. The Transverse Ranges comprise a series of moderate- to high-elevation ranges and adjacent valleys, exhibiting east-west structural trends, contrary to the general

northwest structural trend of the remainder of the state. The ranges include the Santa Monica Mountains and adjacent San Gabriel mountains.

As described in Section II, Project Description, of this Draft EIR, the grading and stockpiling plan for the Project is proposed to be divided into three phases: Phase 1, the Central Area; Phase 2, the East Area; and Phase 3, the West Area. See Figure II-8.

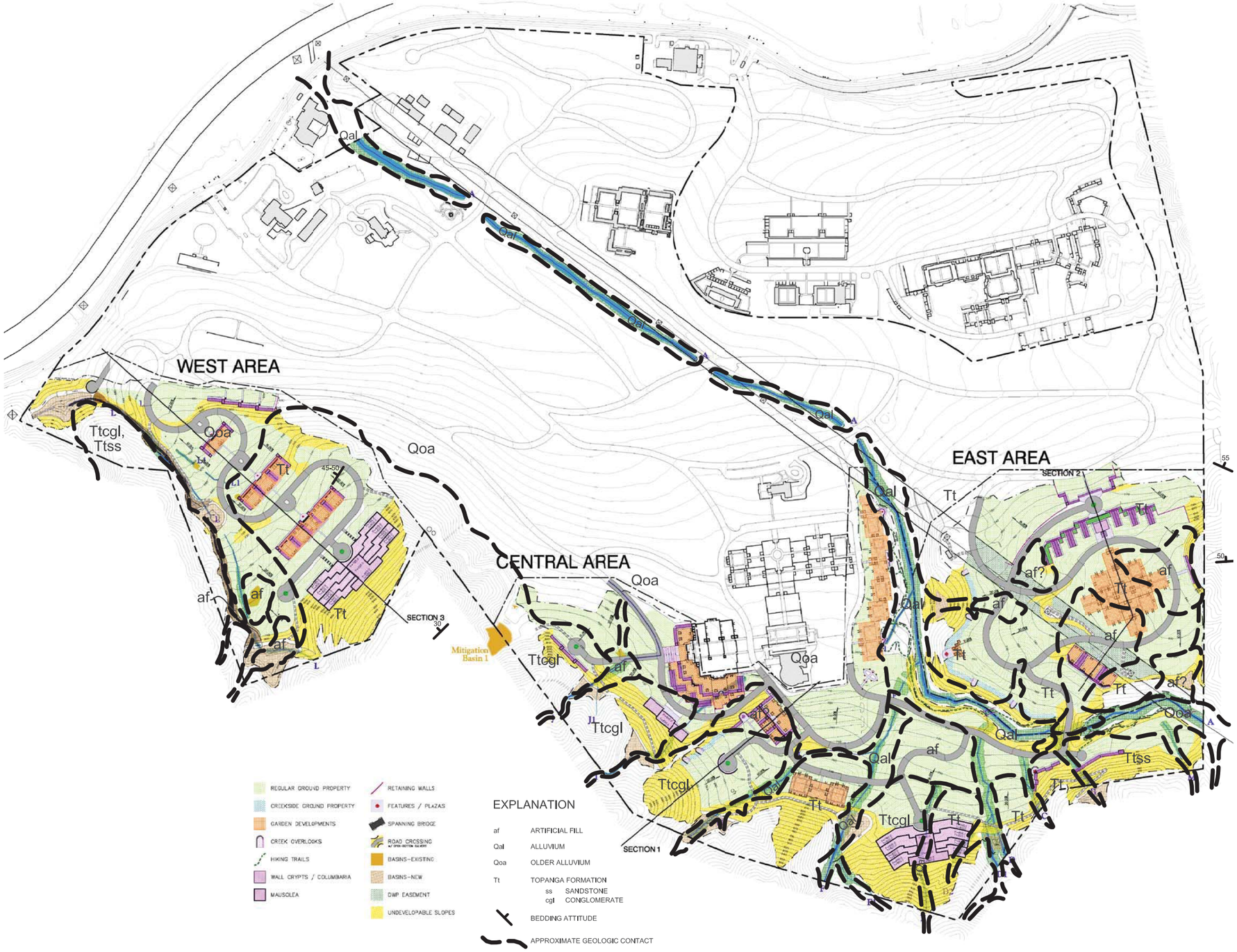
Earth materials that underlie most of the Project Site area consist of either older alluvium or bedrock units of the upper Topanga Formation of Miocene Age. Specifically, older alluvium underlies the lower elevation of the West and Central Areas of the Project Site. Dense, well-consolidated marine sediments of the Topanga Formation underlie all three areas of the proposed Area Phasing Plan. A Geologic Map of the proposed Project Site is provided in Figure IV.E-1 on page IV.E-3.

In addition, minor amounts of recent alluvium and artificial fill are found on the Project Site. Geologically, recent alluvium is largely confined to existing natural canyons and swales on the Project Site. Minor amounts of artificial fill are also found within the areas of planned development. This fill was derived from past grading activity on the Project Site and is assumed to be generally fairly shallow, though not necessarily compact. The largest accumulation of fill is located in the East Area. For a more detailed description of these on-site soils, please refer to the Geotechnical Report included as Appendix E of this Draft EIR.

b. Hydrology

The Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. The clayey alluvium and Topanga Formation and the diorite bedrock beneath and near the Project Site are expected to exhibit relatively low hydraulic conductivity, they are not expected to transmit significant volumes of water. For a detailed discussion pertaining to surface water flow and hydrological impacts, see Section IV.G, Hydrology/Water Quality, of this Draft EIR. Also refer to the Geologic Map provided in the Geotechnical Report included as Appendix E to this Draft EIR.

The overall groundwater flow direction at the Project Site is estimated to be to the north-northwest. Minor amounts of groundwater are expected in the main canyon areas and underlying the developed and irrigated Project Site.



Source: GSC GeoSoils Consultants Inc., 2010.

matrix environmental

Figure IV.E-1
Geologic Map

c. Landslides / Deposits

There is no evidence of landsliding on the Project Site. However, hillside areas south of the West, Central, and East Areas are shown on the Burbank Quadrangle Seismic Hazards Map, prepared by the California Geological Survey (formerly the Division of Mines and Geology) to have a potential for "earthquake-induced landsliding". It is important to note that this designation is based upon the steepness of slope rather than actual geologic conditions, and is generally applied to hillside areas across the state, without thorough evaluation of specific site stability. To assess site-specific landslide risks, reconnaissance geologic mapping was conducted at the Project Site as part of the Geotechnical Study. This reconnaissance geologic mapping found that there is the potential for landsliding to occur on the hillsides at the southern end of the Project Site; however, the potential for landsliding is considered low because identified on-site hillside areas are underlain by dense units of the Topanga Formation and are considerably stable, being only subject to shallow soil slumping.

d. Methane

Methane is generated by the biodegradation of organic matter in the absence of oxygen. Methane is not toxic; however, it is combustible and potentially explosive at concentrations above 53,000 parts per million (ppm) in the presence of oxygen. While non-pressurized methane is normally not problematic, if the gas accumulates to high concentrations and becomes pressurized, detectable levels may enter the interior of a structure through cracks or other penetrations present in floor slabs. The property is located within a designated City of Los Angeles Methane Zone.

In addition, as discussed in greater detail in Section IV.F, Hazardous Materials – Risk of Upset, the Project Site contains four former disposal areas, which were used primarily for green waste. The generation of landfill gases has been evaluated and methane gas has been detected within the limits of Former Disposal Areas 1 and 2.

e. General Faulting and Seismicity

The Project Site is not within an Alquist-Priolo Earthquake Fault Zone. There are no known active or potentially active faults on or adjacent to the Project Site. An active fault is any fault that has experienced any movement within the last 11,000 years. A potentially active fault is any fault that has displayed movement within the last 1.6 million years but activity in the last 11,000 years cannot be demonstrated.

However, the Project Site, as is common with other sites in Southern California, has experienced earthquake-induced ground shaking in the past and can be expected to

experience further shaking in the future. There are some faults in close enough proximity to the Project Site to cause moderate to intense ground shaking during the lifetime of the Project. For instance, the closest active or potentially active fault to the Project Site is the Hollywood Fault, located approximately 2.6 miles from the Project Site. The second and third closest active or potentially active faults to the Project Site are the Raymond and Verdugo Faults, located 5.7 miles and 5.8 miles away, respectively. A complete list of active faults within an approximately 50-mile radius of the Project Site that might cause ground shaking at the Project Site can be found in Appendix E, Geotechnical Report, of this Draft EIR. In addition to being located within close proximity to identified earthquake faults, a portion of the Project Site is located within a City-designated Fault Rupture Study Area.[1]

Numerous inactive (no movement in the last 11,000 years) faults are present within the vicinity of the Project Site. An example is the Hollister Fault mapped to the north of the Project Site, which marks the contact of the granitic rocks and the massive sediments of the Topanga Formation. These inactive faults pose no threat to the proposed Project structures.

f. Regulatory Environment

(1) State

(a) California Building Code

The State of California adopted the 2007 California Building Code (CBC) (California Code of Regulations [CCR], Title 24) , which is based on the 2006 International Building Code on January 1, 2008. These regulations include provisions for site work, demolition, and construction, which include excavation and grading, as well as provisions for foundations, retaining walls, and expansive and compressible soils. Specific CBC building and seismic safety regulations have been incorporated by reference into the City of Los Angeles Building Code with local amendments. As such, the CBC forms the basis of the Los Angeles Building Code.

[1] *City of Los Angeles General Plan Safety Element, Safety Element Exhibit A, March, 1994.*

(b) Seismic Safety Commission Act

The Seismic Safety Commission Act established the State Seismic Safety Commission in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to the Alfred E. Alquist Seismic Safety Commission in 2006. The Commission has adopted several documents based on recorded earthquakes, such as the 1994 Northridge earthquake.

(c) Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo State Special Studies Zone Act (Public Resources Code [PRC] 2621) was enacted by the State of California in 1972 to address the hazard and damage caused by surface fault rupture during an earthquake. The Act has been amended ten times and renamed the Alquist-Priolo Earthquake Fault Zoning Act, effective January 1, 1994. The Act requires the State Geologist to establish "Earthquake Fault Zones" along known active faults in the State. Cities and counties that include Earthquake Fault Zones are required to regulate development projects within these zones. For instance, if an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back. Although setback distances may vary, a minimum 50-foot setback is required. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey, Special Publications (SP) 42, *Fault-rupture Hazard Zones in California*.

(d) Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act of 1990 (PRC Sections 2690–2699) was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Earthquake Fault Zoning Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping "seismic hazards zones". Cities and counties must regulate certain development projects within these zones and incorporate appropriate mitigation measures as necessary. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. The State of California Geologic Survey, previously known as the Division of Mines and Geology, adopted the seismic design provisions in Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California in March 1997. Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California, was issued in May 1992 and revised in April 2004.

(e) Additional Regulations

As the Project Site includes former disposal areas, the regulations of the following state agencies may apply to development in and around the former disposal areas: the Regional Water Quality Control Board; the Integrated Waste Management Board; the Department of Toxic Substances Control; and the South Coast Air Quality Management District.

(f) Construction General Permit

Pursuant to Section 402(p) of the federal Clean Water Act (CWA) (which requires regulations for permitting of certain stormwater discharges), the State Water Resources Control Board has issued one statewide National Pollutant Discharge Elimination System Permit (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit) to apply to all construction activities. Under the Construction General Permit (2009-0009-DWQ), effective July 1, 2010, stormwater discharges from construction sites with a disturbed area of one or more acres are required to be covered by the Construction General Permit.

For construction sites that fall under the Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP) is required to be prepared. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. SWPPPs describe site erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls.

(2) City

(a) Los Angeles Building Code

The City of Los Angeles adopted the 2007 California Building Code and a series of City of Los Angeles amendments on January 1, 2008, known as the 2008 City of Los Angeles Building Code (“2008 Building Code”). Together, the provisions in Volumes 1 and 2 of the 2008 Building Code address issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, and potential primary and secondary seismic effects.

In addition, the City of Los Angeles, Grading Division of the Department of Building and Safety, has adopted Rules of General Application (RGA), a series of Geotechnical Standards that supplement the requirements of the Los Angeles Building Code. The RGAs include specific requirements for seismic design, slope stability, grading, foundation design, geologic investigations and reports, soil and rock testing, and groundwater. The City's Department of Building and Safety is responsible for implementing the provisions of the Los Angeles Building Code and the RGA.

(b) Los Angeles General Plan Safety Element

In addition to the seismic regulations in the Los Angeles Building Code and RGA, the City's primary seismic regulatory document is the Safety Element of the City of Los Angeles General Plan, adopted November 26, 1996. Since 1975, State statute has required city general plans to include a safety element which addresses the issue of protection of its people from unreasonable risks associated with natural disasters (e.g., fires, floods, and earthquakes). The objective of the City's Safety Element is to better protect occupants and equipment during various types and degrees of seismic events. The City's Safety Element includes specific guidelines for evaluating liquefaction, tsunamis, seiches, non-structural elements, fault rupture zones, and engineering investigation reports. The City's Emergency Operations Organization (EOO) – a City department comprised of members from each City agency – helps to administer certain policies and provisions of the Safety Element. The Administrative Code, EOO Master Plan, and associated EOO plans, including hazard-specific plans (e.g., flood), situational contingency plans for known or anticipated events (e.g., annual L.A. Marathon) and pre- and post-event plans (e.g., "Recovery and Reconstruction Plan"), establish the chain of command, protocols and programs for integrating all of the City's emergency operations into one unified operation. Each City agency in turn has operational protocols, as well as plans and programs, to implement EOO protocols and programs. A particular emergency or mitigation triggers a particular set of protocols that are addressed by implementing plans and programs. The City's emergency operations program encompasses all of these protocols, plans, and programs. The Safety Element goals, objectives, and policies are broadly stated to reflect the comprehensive scope of the EOO.

(c) Methane

The City of Los Angeles Methane Seepage Regulations (LAMC §91.7101 et seq.)outline the methane investigation and mitigation requirements for properties located in designated Methane and Methane Buffer Zones in the City of Los Angeles. For new occupiable buildings constructed in either a Methane Zone or Methane Buffer Zone, mitigation requirements are applied based on the City of Los Angeles Department of Building and Safety (LADBS) Design Level. The assigned Design Level is determined based on the results of shallow soil gas testing and gas probe testing at a site prior to

construction. The LADBS has established five Design Levels ranging from Level I to Level V for construction in either a Methane Zone or Methane Buffer Zone. The extent of required mitigation increases with the Design Level.

3. Environmental Impacts

a. Methodology

As discussed above, to evaluate potential hazards relative to geology and soils, a Geotechnical Report was prepared by GeoSoils Consultants Inc. on April 28, 2008 (refer to Appendix E of this Draft EIR). The Geotechnical Report included field exploration (i.e., exploratory soil borings) and laboratory testing to determine the characteristics of the subsurface conditions at the Project Site. In addition, relevant literature (CGS' Seismic Hazard Zone Maps, previous geotechnical studies, etc.) and materials were reviewed as part of the Geotechnical Report.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to geology and soils. These questions are as follows:

Would the project:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

In the context of these questions from the CEQA guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that a project would normally have a significant geology and soils impact if:

(1) Geologic Hazards

- The project would cause or accelerates geologic hazards which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury.

(2) Sedimentation and Erosion

- The project would constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or
- The project would accelerate the natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site.

(3) Landform Alteration

- One or more distinct and prominent geologic or topographic features would be destroyed, permanently covered or materially and adversely modified. Such features may include, but are not limited to, hilltops, ridges, hillslopes, canyons, ravines, rock outcrops, water bodies, streambeds and wetlands.

c. Project Impacts

(1) Description of Proposed Grading

As stated above, the grading and stockpiling plan is proposed to be divided into three grading areas and three phases (Phase 1 (Central Area), Phase 2 (East Area) and Phase 3 (West Area)), as identified in Figure II-8 (See Section II, Project Description, of this Draft EIR). As summarized in Section II, Project Description, of this Draft EIR, approximately 147 acres of the Project Site would be graded, approximately 94 acres would be developed for interment, and approximately 16 acres would be improved with

roadway areas and non-internment buildings. In addition, approximately 36 acres of the Project Site would be used for graded slopes, traps and basins.

The majority of the grading would occur in Phase 1 (Central Area). As part of Phase 1, soil would be stockpiled in the West Area and/or transported off-site. Phase 2 would involve grading in the East Area with soil exported off-site and/or stockpiled in the West Area. Phase 3 would involve grading in the West Area of the Project Site with soil stockpiled and/or transported off-site. The export of soil during the Project would be dependent upon market conditions and construction sites looking for suitable soil for fill material that become available.

(a) West Area

The West Area is situated in the southwestern portion of the Project Site at the base of the foothills of Cahuenga Peak. Proposed improvements within the West Area include: (1) extension of Westward Lane road from the northwest; (2) creation of a large area of developable ground property; (3) construction of gardens (gardens would include wall crypts and lawn crypts); (4) development of a mausoleum; (5) manufacture of 2:1 (horizontal to vertical) gradient slopes that would be landscaped; and (6) improvement of drainage "L" (to include three enlarged debris basins, access roads, and a concrete-lined channel).

(b) Central Area

The Central Area is situated between the West and East Areas on the southern edge of the Project Site at the base of the foothills of Cahuenga Peak. Proposed improvements within the Central Area include: (1) extension of three roads (Evergreen Drive, Memory Lane, and Ascension Road) from the existing development to the north; (2) creation of developable ground property; (3) construction of gardens (gardens would include lawn crypts and may also include wall crypts); (4) development of two mausoleum sites; (5) wall crypts; and (6) manufacture of 2:1 (horizontal to vertical) gradient slopes that would be landscaped.

(c) East Area

The East Area is situated in the southeastern portion of the Project Site, separated from the Central Area by Sennett Creek. A utility easement traverses the central portion of the East Area (from the southeast toward the northeast) that encompasses an approximate width of 150 feet and currently contains power lines and three towers. Considerable grading is proposed to lower a central hill and place fill south of the hill in the East Area. Fill slopes with a gradient of 2:1 are planned to achieve design grade.

Proposed improvements within the East Area include: (1) extension of the unnamed road extending from Magnolia Drive and Memorial Drive to the north and a connection to the Central Area using a box-culvert crossing of Sennett Creek; (2) creation of developable ground property; (3) construction of gardens (gardens would include lawn crypts and may also include wall crypts); (4) development of a cluster of wall crypts with a centralized bell tower and chapel to the south; (5) wall crypt (retaining wall) features; (6) manufacture of 2:1 (horizontal to vertical) gradient slopes that would be landscaped; (7) establishment of at least two debris basins; and (8) provision of access roads to debris basins and power line towers.

(2) Geologic Hazard Impacts

(a) Earthquake Hazards

There are no known active faults in or within 2.5 miles of the Project Site. The Hollywood Fault is the closest potentially active fault, and it is 2.6 miles to the south at its closest point. Movement upon distant active faults will cause varying intensity of ground shaking at the Project Site, as throughout all of Southern California. Pursuant to existing law and applicable regulations, design and construction of the Project slopes and structures will be required to be in conformance with the applicable building code design parameters. Compliance with applicable laws and regulations encompassed in the City of Los Angeles Building Code will reduce the potential for the proposed Project to cause or accelerate geologic hazards related to seismic shaking which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Therefore, Project impacts related to seismic shaking would be less than significant.

Ground rupture occurs when movement on a fault breaks through to the surface. Surface rupture usually occurs along preexisting fault traces where zones of weakness already exist. As noted above, the State has established Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which zones are regulatory zones that encompass surface traces of active faults with a potential for future surface fault rupture. As the Project Site is not located within a State-established Earthquake Fault Zone, the ground rupture hazard for the Project Site is considered to be low. Therefore, the Project would not cause or accelerate geologic hazards related to ground rupture which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, impacts related to ground rupture would be less than significant.

(b) Landsliding

Earthquake-induced landsliding often occurs in areas where previous landslides have moved and in areas where the topographic, geologic, geotechnical and subsurface ground water conditions are conducive to permanent ground displacements. As previously

noted, hillside areas south of the West, Central, and East Areas of the Project Site are located in an areas defined by the California Geological Survey as "Earthquake-Induced Landslide" zones. However, this designation is based upon the steepness of slope rather than actual geologic conditions, and is generally applied to hillside areas across the state, without thorough evaluation of specific site stability. In actuality, reconnaissance geologic mapping of the Project Site found that the designated slopes near the Project Site are underlain by dense units of the Topanga Formation and are considerably stable. The potential for such earthquake-induced landsliding is considered low. However, as there remains a potential for earthquake-induced landsliding, the proposed Project could result in a potentially significant impact. As such, Mitigation Measure E-1 is proposed to reduce impacts to a less than significant level. Impacts subsequent to the implementation of Mitigation Measure E-1 are discussed in detail below.

Regarding general slope stability (i.e., slope instability not induced by an earthquake event), structural planes (bedding) within the coarse grained sediments of the Topanga Formation are not well developed and generally incline at a rather steep angle. The Geotechnical Report indicates that geologic structure should not adversely impact the stability of the high, 2:1 gradient cut slopes. As a result, the proposed Project would result in a less than significant impact with respect to general slope stability and landsliding. Nonetheless, Mitigation Measure E-1 is recommended below to further reduce this less-than-significant impact by recommending detailed geologic mapping supported with subsurface investigation for each phase of development.

(c) Liquefaction

Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. As a result of earthquake-induced ground motions, the soils may acquire a high degree of mobility, which can lead to lateral spreading, consolidation and settlement of loose sediments, ground oscillation, flow failure, loss of bearing strength, ground fissuring, and sand boils. After liquefaction has developed, it can propagate upward into overlying, non-saturated soil as excess pore water escapes. Research has shown that saturated, loose sands with silt content less than about 25 percent are most susceptible to liquefaction, whereas other soil types are generally considered to have a low susceptibility. Liquefaction susceptibility is related to numerous factors, and the following conditions must exist for liquefaction to occur:

- Sediments must be relatively young in age and must not have developed large amounts of cementation;
- Sediments must consist mainly of cohesionless sands and silts;
- The sediment must not have a high relative density;

- Free groundwater must exist in the sediment; and
- The site must be exposed to seismic events of a magnitude large enough to induce straining of soil particles.

According to the State Seismic Hazard Maps (Burbank Quadrangle), the Project's development areas are not located in an area conducive to the liquefaction phenomenon. There is a small chance for liquefaction in Sennett Canyon, but this is outside of planned development areas. Since no development would occur in Sennett Canyon, no impacts would occur if soils in Sennett Canyon were to experience liquefaction during a seismic event. Therefore, the Project would not cause or accelerate geologic hazards related to liquefaction which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, impacts related to liquefaction would be less than significant.

(d) Ground Lurching

Ground lurching is defined as earthquake motion at right angles to a cliff or bluff, or more commonly to a stream bank or artificial embankment that results in yielding or material in the direction in which it is unsupported. The initial effect is to produce a series of more or less parallel cracks separating the ground into rough blocks. These cracks are generally parallel with the top of the slope or embankment. Upon completion of Project grading, ground lurch should present little or no hazard to Project development. Accordingly, impacts related to ground lurching would be less than significant.

(e) Differential Settlement

Differential settlement is a process in which soils in a given area settle at unequal rates. If differential settlement occurs within the soils supporting a structure, it can result in stress, tilt, and damage to the structure. Seismically induced differential settlement is most often associated with liquefaction, or compaction of compressible soils. Areas of uncompacted fill from past grading operations exist on the Project Site. The largest of these is a reported organic rich fill situated in the East Area. Based upon a detailed field investigation conducted as part of the Geotechnical Report, this fill is less than 50 feet in depth. Since uncompacted fills are subject to long-term settlement, impacts from potential development of structures in areas underlain by uncompacted fill without mitigation would be considered potentially significant. Lawn crypts and low height garden walls would not significantly impacted by differential settlement and, therefore, do not require mitigation. Mitigation Measure E-1 is proposed to reduce impacts from potential development of structures to a less than significant level. Impacts subsequent to the implementation of Mitigation Measure E-1 are discussed in detail below.

(f) Methane Hazards

There are four known former disposal areas on the property, including a Caltrans disposal area, a closed 2.5-acre disposal area, an area referred to as "Former Disposal Area 1," and an area referred to as "Former Disposal Area 2." The Caltrans disposal area borders Forest Lawn Drive and was used by Caltrans for construction debris during the construction of the 101 Freeway in the early 1960s. The remaining disposal areas primarily consist of green waste (e.g., tree branches, floral arrangements). The 2.5-acre disposal area was closed in 1985. A post-closure use plan was approved by the Local Enforcement Agency for Former Disposal Area 1 in July 2007 and for Former Disposal Area 2 in June 2009. As discussed in Section IV.F, Hazardous Materials/Risk of Upset, of this Draft EIR, the generation of landfill gases has been evaluated and localized areas of methane gas have been detected within the limits of former disposal areas. Earthwork activities occurring in the vicinity of the former disposal areas would be completed in a manner consistent with applicable Cal-OSHA regulations and applicable closure plans. Specifically, earthwork activities within the vicinity of these areas would be monitored for the presence of methane gas under OSHA and Cal-OSHA requirements. If methane levels are found in excess of OSHA standards, protection measures would be implemented in accordance with OSHA and Cal-OSHA requirements. Additionally, the Project would comply with the Los Angeles Methane Seepage Regulations as required by the Department of Building and Safety prior to the issuance of building permits.

Compliance with the requirements of laws related to the post-closure use of the former disposal areas, the post-closure use plan, and compliance with the City of Los Angeles Methane Seepage Regulations as required by the Department of Building and Safety would ensure impacts associated with localized methane hazards would be less than significant. For further discussion of the former disposal areas see Section IV.F, Materials – Risk of Upset, of this Draft EIR.

(3) Sedimentation and Erosion Impacts

(a) Construction Impacts

The Project would result in soil exposure during construction from grading and earthmoving activities, and there is the potential for construction activities to temporarily increase sedimentation and erosion on the Project Site. Nevertheless, Project construction activities would occur in compliance with state and local requirements as they pertain to erosion control measures, including grading and dust control measures imposed via City grading permit regulations. In addition, during construction, BMPs included as part of the proposed Project's SWPPP would be implemented, consistent with the NPDES Construction General Permit.

With implementation of BMPs under applicable State and local requirements, the proposed Project would not constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or accelerate the natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site during Project construction. Therefore, impacts related to sedimentation and erosion during Project construction would be less than significant. Please refer to Section IV.G, Hydrology/Water Quality, of this Draft EIR for a more detailed discussion of erosion and water quality impacts.

(b) Operational Impacts

Although site investigations found the potential to be low, the erosion of topsoils by surface water runoff and/or shallow soil slumping of the outer 1 to 3± feet of the topsoil may occur on the face of the steeper natural slopes designated as "hillside areas" south and above proposed development of the Central and East Areas. As detailed in the discussion of Project Design Features (PDFs) in Section IV.G, Hydrology/Water Quality, of this Draft EIR, and outlined in the Proposed Hydrology & Preliminary Hydraulic Analysis for Forest Lawn Memorial Park (see Appendix E), the Project would construct debris and runoff containment basins in these hillside areas where the natural drainage swales flow from the hilly areas to the south onto the Project. These PDFs would serve to slow down the velocity of storm runoff and provide a means of reducing sediment load. Further, the proposed Project would implement applicable SUSMP requirements, which would assist in reducing on-site erosion. As such, the proposed Project would not constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or accelerate the natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site during Project operation. Accordingly, impacts related to sedimentation and erosion during Project operation would be less than significant. Nevertheless, mitigation has been proposed in Section IV.G, Hydrology/Water Quality, of this Draft EIR to further reduce impacts resulting from stormwater flows and their effect on sedimentation or erosion.

(4) Landform Alteration Impacts

The proposed Project would entail removing earthen material from hillsides through grading (cut slopes) and filling the adjacent small canyon areas with this earthen material (fill slopes) to create ground conditions more suitable to receive the proposed structures, walls and garden areas. This grading is primarily at the base of the existing hilltop, to the south of existing developed property, and not visible from public vantage points. There are no distinct and prominent geologic or topographic features would be adversely affected by the Project. Sennett Creek would not be disturbed by the Project with the exception of a crossing over the creek near the eastern portion of the Project Site that is not visible from

public vantage points. Therefore, Project impacts related to landform alteration during grading would be less than significant.

4. Cumulative Impacts

Geotechnical impacts related to future development in the City of Los Angeles would involve hazards associated with site-specific soil conditions, erosion, and ground-shaking during earthquakes. These impacts are generally site specific for each development site and would not be common to (nor shared with, in an additive sense) the impacts on other sites. Furthermore, development of related projects would be subject to uniform site development and construction standards, including applicable provisions of Chapter IX, Division 70 of the Los Angeles Municipal Code which addresses grading, excavations, and fills on a site specific basis. As there are no known related projects that are contiguous to the Project Site, cumulative geotechnical impacts would be less than significant.

5. Mitigation Measures

The following mitigation measure is recommended to reduce geology and soils impacts to a less-than-significant level:

Mitigation Measure E-1: Prior to issuance of a building permit, a site-specific geotechnical report shall be prepared for the individual development and/or structure. The geotechnical recommendations in the site-specific geotechnical reports shall be implemented. The site-specific geotechnical reports shall include all applicable recommendations of the *Geologic and Geotechnical Engineering Review of Master Plan Grading Plan, Forest Lawn Memorial-Park, 6300 Forest Lawn Drive, Hollywood Hills, City of Los Angeles, California,* by GeoSoils Consultants, Inc., dated April 28, 2008 (included as Appendix E to this Draft EIR), the site-specific study shall determine which of the following measures listed below are applicable for implementation of the individual development phase and/or structure:

<u>Fill Slopes</u>

- Fill slopes shall be constructed at gradients of 2:1 (horizontal to vertical) or flatter.
- All loose, compressible soils on natural slopes shall be removed by benching into firm bedrock prior to placement of fill. Typical benches are four feet high into firm bedrock. Compaction shall at least meet minimum code standards and extend to face of slope.

Cut Slopes

- All cut slopes shall be constructed at gradients of 2: 1 (horizontal to vertical) or flatter. All cut slopes should be monitored by the geologist of record during grading.
- Local steepening of cut slopes may be feasible but requires specific analysis by the geotechnical engineer of record.
- Cut slopes that face in the same direction as the prevailing drainage shall be protected from slopewash by a non-erosive interceptor swale (V-ditch) placed at the top of the slope.

Pad Capping

- The developable garden area and the developable ground areas, where underlain by dense bedrock at grade shall be over-excavated at least seven feet and rebuilt to grade with compacted fill. This will ease future excavation in these areas.

Compacted Fills

- On-site soils and bedrock materials excavated from cuts may be used in the fill, provided such material has been determined to be suitable by the geotechnical engineer of record. Roots, tree branches, and other deleterious matter missed during clearing shall be removed from the fill as directed by the geotechnical engineer of record.
- Rock fragments less than six inches in diameter may be utilized in the fill, provided:

    1. they are not placed in concentrated pockets;

    2. there is a sufficient percentage of fine-grained material to surround the rocks; and,

    3. the distribution of the rocks is supervised by the geotechnical engineer of record.

- Rocks greater than six inches in diameter shall be taken off-site, or placed in accordance with the recommendations of the geotechnical engineer of record in fill areas designated as suitable for rock disposal.
- Material that is spongy, subject to decay, or otherwise considered unsuitable shall not be used in the compacted fill.
- Representative samples of materials to be used as compacted fill shall be analyzed in the laboratory by the geotechnical engineer of record to determine their physical properties. If any material other than that previously tested is encountered during grading, the appropriate analysis of this material shall be

conducted by the geotechnical engineer of record as soon as possible.

- Material used in the compacting process shall be evenly spread in thin lifts not to exceed six inches in thickness, watered, processed and compacted to obtain a uniformly dense layer. The fill shall be placed and compacted on a horizontal plane, unless otherwise approved by the geotechnical engineer of record. This includes material placed for slope repairs, and utility trench backfills on slope areas.
- Each layer shall be compacted to at least a minimum of 90 percent of the maximum density in compliance with the testing method specified by the controlling governmental agency (in general, ASTM D-1557-02 would be used). For all fills greater than 30 feet in vertical thickness, the portion of the fill below 30 feet should be placed at a relative compaction of at least 95 percent. If compaction to a lesser percentage is authorized by the Department of Building and Safety because of a specific land use or expansive geotechnical conditions, the area to receive fill compacted to less than 90 percent shall either be delineated on the grading plan or appropriate reference made to the area in the geotechnical report.
- All fills should be placed at approximately 120 percent of optimum moisture. If excessive moisture in the fill results in failing tests or an unacceptable "pumping" condition, then the fill shall be allowed to dry until the moisture content is within the necessary range to meet above compaction requirements, or shall be removed or reworked until acceptable conditions are obtained.
- If the moisture content or relative density varies from that required by the geotechnical engineer of record, the contractor shall rework the fill until it is in accordance with the requirements of the geotechnical engineer of record. If a compaction test indicates that the fill meets or exceeds the minimum required relative compaction, but is below 120 percent of optimum, then the fill shall be reworked until it meets the moisture content requirements.
- All fills shall be keyed and benched through all topsoils, slopewash, alluvium or creep material, into sound bedrock or firm material where the slope receiving fill is steeper than a ratio of five horizontal to vertical (in accordance with the recommendations of the geotechnical engineer of record). The standard acceptable bench height is four feet into suitable material.

- The key for sidehill fills shall be a minimum of 12 feet and be founded into bedrock or firm materials, unless otherwise specified by the geotechnical engineer of record.
- Drainage terraces and subdrainage devices shall be constructed in compliance with City regulations, or with the recommendations of the geotechnical engineer and engineering geologist of record.
- A minimum relative compaction of 90 percent is required out to the finish slope face of fill slopes, buttresses and stabilization fills. This may be achieved by either overbuilding the slope a minimum of five feet, and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure, which produces the required compaction.
- All fill slopes shall be planted or protected from erosion by methods specified by the Department of Building and Safety.
- Fill-over-cut slopes shall be properly keyed through topsoil, colluvium or creep material into rock or firm materials; and the transition should be stripped of all soil prior to placing fill. The fill portion of the slope shall be founded on a key to be determined by the geotechnical engineer.

Grading Control

- Inspection of the fill placement shall be provided by the geotechnical engineer during the progress of grading.
- In general, density tests shall be made at intervals not exceeding two feet of fill height or every 1000 cubic yards of fill placed. These criteria would vary depending on soil conditions and the size of the job. In any event, an adequate number of field density tests shall be made to verify that the required compaction is being achieved.
- Density tests shall also be made on the surface material to receive fill as required by the geotechnical engineer.
- All cleanout, processed ground to receive fill, key excavations, subdrains and rock disposal shall be inspected and approved by the geotechnical engineer prior to placing any fill. It shall be the contractor's responsibility to notify the geotechnical engineer when such areas are ready for inspection. The Department of Building and Safety should also inspect these items prior to fill placement.

Construction Considerations

- Erosion control measures, when necessary, shall be provided by the contractor during grading and prior to the completion and construction of permanent drainage controls. Implementation of a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the NPDES General Permit for Stormwater Discharges Associated with Construction Activity, (Construction General Permit) will require erosion control measures.
- Dust control measures shall be implemented at all times during grading activities.
- Upon completion of grading and termination of inspections by the geotechnical engineer, no further filling or excavating, including that necessary for footings, foundations, large tree wells, retaining walls, or other features shall be performed without the approval and observation of the geotechnical engineer or engineering geologist.
- Care shall be taken by the contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of a permanent nature on or adjacent to the property.

6. Level of Significance After Mitigation

With respect to landsliding, as mentioned in the above discussion, although considered low, there is the potential for earthquake-induced landsliding to occur, resulting in a potentially significant impact. Mitigation Measure E-1 is required to reduce potential earthquake-induced landsliding impacts to a less than significant level. Mitigation Measure E-1 would require site-specific geologic investigations for each development phase and/or structure under the proposed Project. Further, Mitigation Measure E-1 would require all development to adhere to the applicable recommendations of the Project's Geotechnical Report, including the recommendation that all cut slopes be constructed at gradients of 2:1 (horizontal to vertical) or flatter and be monitored by a geologist of record during grading. With implementation of Mitigation Measure E-1, the proposed Project would not cause or accelerate geologic hazards related to landsliding that would result in substantial damage to structures or infrastructure, nor expose people to substantial risk of injury. Accordingly, potential impacts related to landsliding would be reduced to a less than significant level through the implementation of Mitigation Measure E-1.

With respect to differential settlement, as mentioned above, there are areas of uncompacted fill material up to 50 feet in depth located throughout the Project's proposed development areas. As a result, these uncompacted fills could result in differential settlement during an earthquake event, resulting in a potentially significant impact.

However, Mitigation Measure E-1 is required to reduce potential differential settlement impacts to a less than significant level. Mitigation Measure E-1 would require site-specific geologic investigations for each development phase and/or structure under the proposed Project and would require all development to adhere to the applicable recommendations of the Project's Geotechnical Report. With implementation of Mitigation Measure E-1, the proposed Project would not cause or accelerate geologic hazards related to differential settlement that would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury. Accordingly, potential impacts related to differential settlement would be reduced to a less than significant level through the implementation of Mitigation Measure E-1.

All other impacts with respect to geology and soils were found to be less than significant without the implementation of mitigation measures. After incorporation of the mitigation measure listed above, all impacts related to geology and soils would be less than significant.

IV. Environmental Impact Analysis

F. Hazardous Materials/Risk of Upset

1. Introduction

This section addresses hazardous materials and is based, in part, on the *Phase I Environmental Site Assessment Report* (Phase I ESA) prepared for the Project Site by Geosyntec Consultants (see Appendix F to this Draft EIR), which included background research, a geologic and hydrogeologic summary, records review, and site reconnaissance.

Hazardous materials are generally substances which by their nature and reactivity have the capacity to cause harm or a health hazard during normal exposure or an accidental release, and are characterized as being toxic, corrosive, flammable, reactive, an irritant or strong sensitizer. Activities and operations that use or manage hazardous or potentially hazardous substances, or that are located in areas where such substances exist, could create a hazardous situation if the release of these substances occurred. Individual circumstances, including the type of substance, quantity used or managed, and the nature of the activities and operations, affect the probable frequency and severity of the consequences from a hazardous situation. Federal, state and local laws regulate the use and management of hazardous or potentially hazardous substances.

2. Environmental Setting

a. Existing & Historical Uses of the Project Site

The Project Site is comprised of approximately 444 acres in the City of Los Angeles. The majority of the property, 410 acres, was originally approved by the City for cemetery use in 1948. Forest Lawn has operated a cemetery use at this location for approximately 60 years. The Project Site is currently developed with an administration building, a mortuary and flower shop, a chapel, a storage building, a garage and maintenance building, churches, an auditorium and museum, a columbaria, outdoor mausoleums, garden areas, interment sites and landscaped areas and roadways. An existing Los Angeles Department of Water and Power (LADWP) power line easement traverses the Project Site from northwest to southeast. The Project Site is also bisected by Sennett Creek, an existing concrete culvert drainage, a portion of which has been subject to habitat restoration efforts. Prior to 1948, uses at the Project Site included a ranch, film set, private

residence, horse track, and stables.[1] A former surface quarry that provided aggregate materials was operated on a 20.7-acre area in the southwestern portion of the Project Site by Mid-City Granite from 1969 to 1994; however, starting in 1994, Forest Lawn "reclaimed" the mining area pursuant to an approved reclamation plan. The reclamation was completed and approved by the local and state agencies in 2006.

Additionally, there are four known former disposal areas on the Project Site. These areas include a Caltrans disposal area, a closed 2.5-acre disposal area, and two other former disposal areas (referred to as "Former Disposal Area 1" and "Former Disposal Area 2"). The Caltrans disposal area borders Forest Lawn Drive and the adjacent Mount Sinai Memorial Park. This disposal area was used by Caltrans to dispose of inert construction debris during the construction of the US 101 Freeway in the early 1960s. The remaining three disposal areas were used by Forest Lawn to dispose of inert waste, primarily consisting of green waste (e.g., tree branches, floral arrangements, etc.), generated during cemetery operations. No hazardous waste is known to have been disposed of at the former disposal areas. All four former disposal areas have been closed and have approved Post-Closure Land Use Plans. The proposed Project's development areas would occur within the vicinity of the former 2.5-acre disposal area and Former Disposal Area 2.

b. Surrounding Uses

The Project Site is immediately bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel, the SR-134 Freeway, Mount Sinai Memorial Park, and the administrative offices of the Junior Achievement Foundation on the north and northeast; Griffith Park, including the Toyon Landfill, and the Santa Monica Mountains on the south and east; and by contiguous undeveloped land owned by the Forest Lawn Memorial-Park Association to the west. Surrounding land uses beyond the SR-134 Freeway to the north include residences, a park, a hospital, the Disney Studios, the ABC Studio office buildings, and the Warner Brothers Studios lot, which are all located within the City of Burbank. For purposes of this analysis, the following land uses surrounding the Project Site are identified as sensitive receptors with respect to hazardous material exposure:(1) Buena Vista Park at the southeast corner of Riverside Drive and Bob Hope Street, approximately 0.08 miles north of the Project Site; (2) Johnny Carson Park at the northeast corner of Riverside Drive and Bob Hope Street, approximately 0.19 miles north of the Project Site; (3) Providence High School at 511 S. Buena Vista Street, approximately 0.13 miles north of the Project Site; (4) Providence St. Joseph's Medical Center at 501 S. Buena Vista Street, approximately 0.28 miles north of the Project Site; (5) single-family residences

[1] *Historical Resources Assessment of the Forest Lawn Memorial Park, LSA Associates, October 2008*

approximately 0.07 miles northwest of the Project Site; and (6) single-family residences approximately 0.30 miles north of the Project Site.

c. Geology and Topography of the Project Site

The Project Site is located near the northeastern end of the Santa Monica Mountains. The Project Site occupies the south margin of a small valley that drains north to northwest from Cahuenga Peak toward the Los Angeles River Flood Control Channel. Elevations range from approximately 505 feet above mean sea level (MSL) in the northwestern portion of the Project Site to approximately 1,000 feet above MSL in the southern portion of the Project Site.

The Santa Monica Mountains comprise the southern edge of the central Transverse Ranges geomorphic province, south of which lies the Peninsular Ranges province. The Transverse Ranges comprise a series of moderate- to high-elevation ranges and adjacent valleys, exhibiting east-west structural trends, contrary to the general northwest structural trend of the remainder of the state. The ranges include the Santa Monica Mountains and adjacent San Gabriel Mountains.

The eastern portion of the Project Site overlies recompacted fill material, recent alluvium/colluvium in drainages, and bedrock of the Miocene Topanga Formation. Fill material consists of silty to clayey sand and sandy clay with minor gravel, refuse and organic matter. Alluvium/colluvium consists of clayey sand interbedded with silty sand and stringers of pea gravel. The Topanga formation generally consists of three members, separated by unconformities: (1) a basal marine conglomeratic sandstone up to 328 feet thick, (2) a dominantly basaltic middle unit of multiple submarine lava flows and tuffs as much as about 2,198 feet thick, and (3) an upper unit of sedimentary breccia, conglomerate, sandstone, and siltstone that probably exceeds 3,281 feet in thickness and locally contains marine fossils. At the Project Site, the Topanga Formation consists of highly weathered, micaceous, clayey sandstone, siltstone, and shale.

d. Hydrogeology of the Project Site

The Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. However, the clayey alluvium and Topanga Formation and the diorite bedrock beneath and near the Project Site are expected to exhibit relatively low hydraulic conductivity, and are not expected to transmit significant volumes of water.

Groundwater at the Project Site was previously measured at depths ranging from approximately 23 feet below ground surface (bgs) in the eastern portion of the Project Site to over 58 feet bgs along the boundary with Mount Sinai Memorial Park. Because of reported heavy rainfall during the time of drilling for those previous measurements, the measured stabilized groundwater levels are expected to represent a high groundwater condition. Calculated groundwater elevations from historical data suggest a general groundwater flow direction to the north-northwest.

e. Existing Hazardous Materials Conditions

(1) Records and Database Search for Project Site

A database search report was obtained from Environmental Data Resources, Inc., and is included as an appendix to the Phase I ESA, which is included as Appendix F to this Draft EIR. The report documents findings of various federal, state and local regulatory database searches regarding properties with known or suspected releases of hazardous materials or petroleum hydrocarbons.

The Project Site is listed as a small quantity generator on the Resource Conservation and Recovery Act Small Quantity Generator (RCRA-SQG) and the HAZNET databases for disposal of small quantities of waste oil, asbestos-containing waste, and other inorganic solid and liquid wastes. The Project Site is also listed on the National Pollutant Discharge Elimination System (NPDES) and California Waste Discharge System (CA WDS) databases because it has been issued a waste discharge requirement for stormwater runoff. However, in October 2009, the State Water Resources Control Board (SWRCB) approved a Notice of Termination indicating that the Project Site was no longer required to comply with the Industrial Activities Storm Water General Permit (NPDES Permit No. 97-03-DWQ) because the Project Site had discontinued its concrete batch operations.

The Project Site is listed on several databases for underground storage tanks (USTs). According to the databases, there were 3 USTs at the Site: one 10,156-gallon tank for regular unleaded fuel installed in 1950, one 10,220-gallon tank for regular fuel installed in 1955, and one 2,040-gallon tank with unknown contents. These USTs were removed and the cases were closed with agency oversight as discussed in more detail below. The former Mid City Granite facility is shown in the databases to have contained USTs in the past. The Mid City Granite facility reclamation was completed and approved by the local and state agencies in 2006.

The Project Site is also listed on the Solid Waste Information System (SWIS) database for a closed, unpermitted solid waste disposal site (i.e., the 2.5-acre former landfill) that is inspected quarterly.

(2) Records and Database Search for Surrounding Area

Approximately 72 properties were identified within 1 mile of the Project Site. One of these facilities, the Mount Sinai Memorial Park, is located immediately northeast of the Project Site. Mount Sinai Memorial Park adjoins the northeast side of the Project Site. Mount Sinai Memorial Park is listed on several databases because there is an active UST investigation, historical USTs and the property is a small quantity generator of hazardous wastes. However, the Mount Sinai facility is located at a lower elevation than the Site (down-gradient in groundwater flow terms) and, therefore, has a limited potential to affect the Project Site.

Up-gradient facilities, those at a higher elevation than the site, may pose a hazard to the Project Site if the facility is an active/open facility and groundwater flows toward the site. The Mt. Lee Communication Center is located approximately 1,700 feet south of the Project Site and is listed on several databases for a release of diesel fuel that reportedly affected only soil. The spill was reported on December 15, 1992, and the case was closed on October 5, 1995. The facility is also listed as a small quantity generator “with no violations”. Based on the distance of this facility from the Site, the fact that the diesel fuel release reportedly only resulted in affected soil, and that the case is closed, adverse impacts to the Project Site are not likely.

The Toyon Canyon Landfill, is located at a higher elevation (i.e., hydraulically up-gradient) than the Site, but is a closed and monitored landfill. The Toyon Canyon Landfill is approximately 1,100 feet east of the Site. According to the California Integrated Waste Management Board (CIWMB), this landfill is a permitted, closed, solid waste disposal site owned by the City of Los Angeles Bureau of Sanitation. The landfill is reportedly inspected quarterly, but no other information was available. Although insufficient information is available to evaluate the nature of the potential impacts associated with the landfill, based on the distance of this property from the Site, and its closed and monitored status, adverse impacts to the Project Site are not likely.

The remaining 69 facilities are at a far enough distance from the Project Site and are at a lower elevation (i.e., hydraulically down-gradient) than the Site, and are unlikely to affect the Project Site.

The Project Site is located just outside the boundaries of the San Fernando Valley Area 2 (Crystal Springs Area) NPL site in which the regional groundwater is contaminated

with various volatile organic compounds (VOCs), primarily trichloroethylene (TCE) and tetrachloroethylene (PCE). Area 2 covers approximately 3,975 acres and the groundwater within the unit is used as a source of drinking water. Assessment of the San Fernando Valley Area 2 NPL site began in the 1980s and is ongoing. The current radius map indicates that the Area 2 NPL boundary is approximately 0.5 mile north of the Project Site According to the database search report, Forest Lawn is not a Potentially Responsible Party to the NPL site.

No other properties within one mile of the Project Site were identified as having the potential to affect the Project Site. For a full listing of properties identified within a one mile radius of the Project Site, please refer to the Phase I ESA included as Appendix F to this Draft EIR.

(3) Summary of Previous Investigations

The following is a summary of prior investigations conducted at the Project Site based on documents reviewed at various state and local agencies, such as the Los Angeles Regional Water Quality Control Board (LARWQCB) and the City of Los Angeles Fire Department (LAFD), and the Phase I ESA preparer's knowledge of the Project Site.

(a) Underground Storage Tanks (USTs)

According to records obtained from the LAFD, there were 3 historic USTs at the Project Site: one approximately 10,000-gallon single-wall steel UST for gasoline fuel installed in 1950 at the administrative and mortuary building, one approximately 10,000-gallon single-wall steel UST for gasoline installed in 1955 in the maintenance yard, and one approximately 1,000-gallon steel UST for diesel fuel located in the southeastern portion of the Project Site.

The two approximately 10,000-gallon gasoline USTs were removed from the Project Site in November 1990. According to the tank removal report, both tanks were intact with only minor rusting when they were removed. The dispenser lines associated with these tanks were later removed in February 1991. Subsequent to the removal of the two USTs and their dispenser lines, soil samples were taken. Total petroleum hydrocarbons (TPH) were initially detected in the soil samples collected beneath the dispensers for the tank in the maintenance yard at concentrations up to 2,067 mg/kg. TPH was not detected in other samples. Subsequent soil samples in the vicinity of the dispensers detected TPH in the five-foot sample of one boring at a concentration of 12mg/kg. Benzene, toluene, ethylbenzene, xylenes, and lead were not detected in any of the samples. Based on the results of these additional soil samples, a No Further Action letter was issued by the LAFD in December 1991.

The 1,000-gallon diesel fuel UST was removed from the Project Site in September 1988. One soil sample was collected from 2 feet below the removed tank and was found to contain 3 mg/kg of total recoverable petroleum hydrocarbons (TRPH). No additional assessment was required.

Current USTs at the Project Site include one approximately 10,000-gallon double walled steel UST for unleaded gasoline and one approximately 2,000-gallon UST for diesel. Both USTs were installed in 1990 within the maintenance yard and have a leak detection system. There is also a South Coast Air Quality Management District (SCAQMD) permit to operate an above-ground fuel pumping station associated with the 10,000-gallon gasoline UST.

(b) Well Investigation Program (WIP)

In April 1990, in response to the presence of organic contaminants in nearby drinking-water wells, (part of the San Fernando Valley NPL site) the LARWQCB sent Forest Lawn a chemical storage and use questionnaire. In August 1995, the Project Site was inspected by the LARWQCB. Based on the responses from the questionnaire and the site inspection, a No Further Action letter was sent to Forest Lawn by the US Environmental Protection Agency (EPA) in May 1996.

(c) Former Disposal Areas

(i) Former 2.5-Acre Landfill Area

As described above, an approximately 2.5-acre former landfill area is located on the northeastern portion of the Project Site near Mount Sinai Memorial Park. The landfill area received organic material (primarily grass clippings, flowers, floral arrangements, tree clippings, etc.) and cover soil during its operation. Borings drilled in the area of the landfill indicated that the depth of the waste fill ranged from 4 to 34 feet bgs. The 2.5-acre landfill area ceased operations in August 1984. In 1985, a landfill closure plan was approved by the Los Angeles Board of Public Works.

As part of the approved landfill closure plan, four gas monitoring wells, one groundwater monitoring well, and one dual completion groundwater and gas monitoring well were installed in 1986. In addition, a drainage interceptor ditch was installed to convey stormwater from upslope areas around the disposal area. Additional perimeter gas monitoring wells were installed in 1996.

Groundwater in the monitoring well was encountered at approximately 27 to 30 feet bgs. Initial sampling of the groundwater monitoring wells indicated the groundwater contained total organic carbon up to 20 mg/L and total dissolved solids up to 1800 mg/L.

Phenols and total organic halides were not detected above the method detection limit. Initial sampling of the gas monitoring wells indicated combustible gases present up to 35 percent by volume along the boundary with Mount Sinai Memorial Park. Quarterly monitoring of the groundwater and gas wells was conducted from approximately June 1986 until approximately July 1995. Quarterly monitoring of the gas wells continued until 1999. According to the quarterly reports between 1994 and 1999, landfill gas was not detected in the perimeter gas monitoring wells.

A post closure use plan for the landfill area was submitted in January 1997. In accordance with the post closure use plan, fill material with a minimum thickness of 15 feet was placed above the landfill area. The landfill area is still inspected quarterly by the City of Los Angeles. Two perimeter gas monitoring wells were observed during the site reconnaissance performed for this Project's Phase I ESA and are monitored quarterly.

(ii) Former Caltrans Disposal Area

As described above, the former Caltrans disposal area is located at the northeast corner of the Project Site and extends across the boundary of the Project Site and into Mount Sinai Memorial Park. The Caltrans disposal area also partially overlaps the 2.5-acre landfill area described above. Caltrans reportedly used the land as a disposal area for inorganic construction debris from the construction of nearby freeways in the early 1960s. The Caltrans disposal area was reportedly encountered at approximately 7.5, 20, and 31.5 feet bgs during the drilling of borings associated with the 2.5-acre disposal area.

(iii) Former Disposal Area 1

Former Disposal Area 1 is located in the southern portion of the Project Site. Former Disposal Area 1 was once transected by a gully that appears to have been filled with green waste (i.e., tree branches, floral arrangements, etc.) from approximately 1952 through 1959. In May 2006, discolored soil and wooden debris was discovered by Forest Lawn in Former Disposal Area 1.

As a result of this discovery, various soil and soil gas investigations were performed between May 2006 and October 2006. Environmental analyses indicated that the samples collected from the discolored soil did not contain detectable concentrations of TPH, VOCs, semi-volatile organic compounds, fecal coliform, polynuclear aromatic hydrocarbons, pesticides, herbicides, asbestos or PCBs. In addition, the soil samples did not contain concentrations of metals, including aluminum and hexavalent chromium, above the EPA Region 9 Preliminary Remediation Goals (PRGs) for industrial soil. VOCs and TPHs were not detected in the soil gas samples collected. Methane was detected in 16 of the 25 soil gas samples. In general, the methane concentrations significantly declined to the east and west of the historical gully, suggesting that methane concentrations are localized within the

area of the historical gully. The source of the methane and discolored soil appeared to be decomposition of green waste that was filled into the historical gully.

A Post-Closure Land Use Plan was approved by the Local Enforcement Agency ("LEA") in July 2007, with conditions relating to interment and worker safety conditions. Two gas monitoring probes were installed and monitored quarterly for one year and then abandoned with the LEA's permission. Former Disposal Area 1 is now a grass-covered lawn.

(iv) Former Disposal Area 2

Former Disposal Area 2 is located in the southeastern portion of the Project Site and was used from the 1950s through the 1970s for disposal of various wastes associated with the use of the Project Site. The disposal area filled in a natural canyon, with interlayers of wastes and native soil and an approximately 10-foot soil cap.

In 2006, soil gas samples were collected from 18 locations within and surrounding the estimated footprint of the former disposal area. Methane was detected in all soil gas samples and ranged in concentration from 0.0041 percent to 70 percent by volume. The highest methane concentrations were detected along the eastern and southern portions of the former disposal area. Methane was detected in concentrations from 38 percent to 49 percent just outside the eastern and southeastern boundary of the estimated footprint, suggesting methane is migrating in these directions. VOCs were detected only in one soil gas sample for dichlorodifluoromethane at a concentration of 2.6 micrograms per liter (µg/L). Hydrogen sulfide concentrations ranged from background (i.e., less than 0.005 parts per million (ppm)), to 2.7 ppm.

The LEA approved a Post-Closure Land Use Plan for Former Disposal Area 2 in 2009. The approval required the installation of new landfill gas probes as well as requirements for interment fill and worker safety.

(d) Hazardous Materials Usage

According to the Phase I ESA, the following hazardous materials are used or generated at the Project Site: oils and lubricants, fuels, waste oil, antifreeze, welding gases, aerosol paints, adhesives, floral sprays, various cleaning supplies, and preservation fluids such as formaldehyde. Most of the on-site hazardous substances are located in the maintenance yard, at which the following hazardous substances were observed:

- One 10,000-gallon UST containing unleaded gasoline, one 2,000-gallon UST containing diesel fuel, and a dispenser island at the fueling area;

- Lubricating oil, waste lubricating oil, 2-cycle oil, transmission fluid and grease;
- Antifreeze and waste antifreeze;
- A propane tank;
- Fertilizer and pre-emergent herbicide;
- Flammable liquid storage;
- Various gases;
- Portland Cement.

In addition, Forest Lawn employs pest control contractors to apply pesticides around buildings on a monthly basis. The pest control contractors are licensed by the State of California Department of Health Services and the contractor stores its landscaping supplies off-site. Forest Lawn applies a pre-emergent herbicide as part of its lawn maintenance. As mentioned above, the pre-emergent herbicide is stored in the maintenance yard.

Transformers are located throughout the Project Site and can contain Polychlorinated biphenyls (PCBs). All transformers were observed to be in good condition and no leaks or staining was observed during the Phase I ESA site reconnaissance. No evidence of electrical transformers containing PCBs was identified during the site reconnaissance or interviews with Forest Lawn staff.

During the site reconnaissance, all hazardous materials were found to be adequately contained and stored within secondary containment and no staining or indication of past release is associated with the use of these materials.

A masonry facility was formerly located north of the Maintenance Yard. As mentioned above, this facility has been removed and is currently an open, grassy area. An acid pH adjustment was used for liquids in the 4-stage clarifier when the plant was in operation, but has since been removed.

(e) Hazardous Waste

Forest Lawn generates hazardous and non-hazardous waste as a result of vehicle maintenance and general operations throughout the year. Waste generated and disposed of since 2004 has included: non-Resource Conservation and Recovery Act (RCRA) waste oil; non-RCRA antifreeze; Safety Kleen brake cleaner; Safety Kleen aqueous parts wash; waste absorbent material; non-hazardous clarifier waste; and waste oil filters and pump-out fluids.

(f) Asbestos Containing Materials (ACMs) and Lead-Based Paint (LBP)

ACMs are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. ACM is generally defined as either friable or non-friable. ACM is defined as any material containing more than one percent asbestos. Friable ACM is more likely to produce airborne fibers than non-friable ACM, and can be crumpled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is defined as any material containing one percent or more asbestos that cannot be crumpled, pulverized, or reduced to powder by hand pressure. When left intact and undisturbed, ACM does not pose a health risk to building occupants. Potential for human exposure only occurs when ACM becomes damaged or actively worked (e.g., drilled, sanded, scraped, etc.) to the extent that asbestos fibers become airborne and can be inhaled. These airborne asbestos fibers are carcinogenic and can cause lung disease.

LBP, which can result in lead poisoning when consumed or inhaled, was widely used prior to 1950 to coat and decorate buildings. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents until 1978. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACM, LBP generally does not pose a health risk to building occupants when left undisturbed; however, deterioration, damage, or disturbance can result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, only buildings built before 1978 are presumed to contain LBP, as well as buildings built shortly thereafter, as the phase-out of LBP was gradual.

Most of the existing structures on the Project Site were built prior to 1970 and may contain ACMs and/or LBPs. In compliance with state and federal laws, a notice of the presumed and known ACMs is provided annually by Forest Lawn to all employees and contractors. A list of the presumed and known lead-containing materials was provided by Forest Lawn and is included in Appendix H to the Phase I ESA included as Appendix F to this Draft EIR.

(g) Other Observations

Minor staining was observed in the vicinity of the air compressor in the Maintenance Yard and around the backup generator in the administration and & mortuary area.

f. Regulatory Environment

Many agencies are involved with the regulation of hazardous materials use. At the federal level, these include the EPA and the Occupational Safety and Health Administration (OSHA). State agencies, including the Department of Toxic Substances Control (DTSC), have parallel (and in some cases more stringent) rules governing the use of hazardous

materials. The LAFD is the local regulating body for hazardous materials, due to the passage of Assembly Bills 2185 and 2187, which require disclosure of the use and storage of hazardous materials that could lead to public exposure to these substances. In addition to the laws governing the use of hazardous materials, federal and state laws also regulate the generation, transportation, and disposal of hazardous wastes. At the federal level, the principal regulatory agency is the EPA. Within the state, DTSC has primary regulatory responsibility for disposal of hazardous waste.

(1) Asbestos and Lead

The EPA established National Emission Standards for Hazardous Air Pollutants (NESHAP) that govern the use, removal, and disposal of ACMs. Implementation of the NESHAP requirements has been delegated to the SCAQMD, which implements it through Rule 1403. Rule 1403 sets forth regulations and procedures for the identification, notification, removal and disposal of ACMs. Friable asbestos waste is considered a hazardous waste by the state of California and must be disposed of in an EPA-approved landfill. Owners of pre-1979 buildings known to contain ACMs are required to prepare an asbestos management plan. The California Occupational Safety and Health Administration (Cal-OSHA) regulates ACMs and LBPs as they relate to employee safety. In addition, OSHA has established safety levels for exposure to lead during construction activities. As discussed in greater detail below, the use of ACMs and LBPs in new building materials was prohibited under the Toxic Substances Control Act (TSCA) of 1976.

(2) Storage Tanks

USTs are subject to regulation under the RCRA, 42 USC 6991, and 40 Code of Federal Regulations (CFR) 280. At the state level, the storage of hazardous materials in USTs is regulated by the SWRCB. Authority for hazardous materials is delegated to the local level through the LARWQCB and the LAFD. The LAFD administers and enforces Federal and State laws, as well as local ordinances for USTs.

(3) Hazardous Waste

RCRA was enacted in 1976 and mandated a national waste management program. Under RCRA regulations, established by the EPA, hazardous waste must be tracked from the time of generation to the point of disposal. RCRA also sets out standards for hazardous waste treatment, storage, and disposal units. The EPA delegated implementation of the RCRA program to the State of California Environmental Protection Agency's (CalEPA) DTSC. In addition, the State of California has implemented an additional level of regulation for waste materials that are not subject to federal hazardous waste regulations through the California Hazardous Waste Control Law. In addition, OSHA

regulations contain worker safety provisions with respect to hazardous waste management operations and emergency responses involving hazardous waste.

(4) Hazardous Materials

Hazardous materials have certain chemical, physical, or biological properties that cause them to be considered hazardous to human health or the environment. Federal occupational safety and health regulations of the OSHA contain provisions with respect to hazardous materials management. The California Occupational Safety and Health Administration (Cal-OSHA) also requires preparation of an Injury and Illness Prevention Program which is an employee safety program of inspections, procedures, training and communication.

The Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the California Hazardous Substance Account Act require reporting of certain releases of hazardous substances from specified facilities and set forth response actions for National Priority List sites.

Established in 1976 and amended in December 31, 2002, by the EPA, the TSCA of 1976 grants the EPA power to require proper reporting, record-keeping, and testing requirements relating to chemical substances and/or mixtures. Specifically, the TSCA addresses the production, importation, use and disposal of specific chemicals including PCBs, asbestos, radon, and LBPs.[2] The TSCA establishes the EPA's authority to require the notification of the use of chemicals, require testing, maintain a TSCA inventory, and require those importing chemicals under Section 12 (b) and 13 to comply with certification and/or other reporting requirements. This Federal legislation also phased out the use of PCBs, ACMs, and LBPs in new building materials, and sets requirements for the use, handling, and disposal of these materials. For example, the disposal standards for LBPs wastes are detailed under Section 402(a)(1).

(5) Worker Safety

Cal-OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace, including ACMs and LBP. Cal-OSHA standards are generally more stringent than federal OSHA regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure.

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[2] *Summary of the Toxic Substances Control Act, available at http://www.epa.gov/lawsregs/laws/tsca.html, accessed May 2010.*

The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. OSHA standards also include standards regarding safe exposure limits for chemicals to which construction workers may be exposed, including methane (Safety and Health Regulations for Construction (29 CFR Section 1926.65, Appendix C).

(6) Pesticide Use

The Federal Insecticide, Fungicide, and Rodenticide Act establishes regulations for the proper use, storage, and disposal of pesticides. Pesticide management activities are subject to Federal regulations contained in 40 CFR Sections 162, 165, 166, 170, and 171. In addition, the OSHA Hazard Communication regulations require that a Material Safety Data Sheet (MSDS) be prepared for potentially harmful substances, including pesticides. The MSDS includes instructions for the proper handling, storage, and disposal of each individual pesticide.

(7) Disposal Sites and Methane Gas

Pursuant to the California Code of Regulations (CCR), the local enforcement agencies (LEAs) have oversight of disposal site post closure land uses (27 CCR Section 21190). Cal-OSHA regulates worker exposure to airborne contaminants (such as methane gas) during construction under Title 8, Section 5155,

The Project Site is located in an identified City of Los Angeles Methane Zone.[3] Chapter IX, Article 1, Division 71 of the LAMC (Los Angeles Methane Seepage Regulations), designates Methane Zone and Methane Buffer Zones and establishes requirements for projects located within a Methane Zone or Methane Buffer Zone.

3. Environmental Impacts

a. Methodology

To assist in evaluating the potential impacts associated with hazards and hazardous materials that could occur as a result of construction and/or operation of the proposed Project, a Phase I ESAs was prepared by Geosyntec Consultants in September 2010. The Phase I ESA includes a review of historical aerial photographs and maps, a review of

[3] *City of Los Angeles Department of Building and Safety, Parcel Profile Report: 6300 West Forest Lawn Drive, generated May 28, 2010.*

relevant hazardous materials databases, and site reconnaissance to determine if any recognized environmental concerns. Please refer to Appendix F of this Draft EIR for a copy of Phase I ESA.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides screening questions that address impacts with regard to hazards and hazardous materials. These questions are as follows:

Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* provides that the determination of significance with respect to risk of upset/emergency preparedness shall be made on a case-by-case basis, considering the following factors:

- The regulatory framework;
- The probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance;
- The degree to which the project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences; and
- The degree to which project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance.

Based on these factors, the proposed Project would have a significant impact if it were to expose people to a substantial risk resulting from the release or explosion of hazardous material, or from exposure to a health hazard in excess of regulatory standards. Additionally, the proposed Project would have a significant impact if it would require a new, or interfere with an existing, emergency response plan.

c. Analysis of Project Impacts

Following is a discussion of the Project's impacts during construction and operation with respect to hazardous materials and risk of upset. The proposed Project seeks approval to construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. It is estimated that over a 15-year construction period, approximately 2.7 million cubic yards of earth would be graded. Net export during grading will be approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt will be exported in connection with grave preparation from 2011 to 2050. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. Additionally, the construction process may also result in the demolition of structures that may contain ACMs and or LBP.

(1) Construction

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

During the demolition of existing structures and grading/excavation phases, the Project may involve the hauling, routine transport and disposal of potentially hazardous materials, including ACMs, LBPs, oils and lubricants, fuels, waste oil, paints, and

adhesives. All hazardous materials encountered or used during demolition, grading/ excavation, and construction activities, including ACMs and LBP, would be handled in accordance with all applicable federal, state, and local regulations, which include requirements for proper handling and disposal of hazardous materials. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during construction to less-than-significant levels.

(b) Accidental Release of Hazardous Materials

There is the potential for on-site grading to encounter contaminated soil or disturb known or unknown underground structures, such as USTs, which could lead to soil and/or groundwater impacts and the potential exposure of people and the environment to hazardous materials. However, any previously unidentified contaminated soil that is encountered and determined unsuitable for fill material would be handled in accordance with all applicable local, State, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste, based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. As a result, if impacted soils or structures such as USTs are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards.

Many of the on-site structures were constructed prior to the ban on ACMs and LBPs in new building materials, including the Maintenance Office and Maintenance Building. As such, the renovation and/or removal of these buildings could expose workers to ACMs and/or LBPs still present in the buildings, representing a potential environmental hazard to workers.

In accordance with SCAQMD's Rule 1403, a complete survey would be conducted prior to any demolition activities to identify all sources of ACMs. In accordance with the EPA's NESHAP regulation and SCAQMD's Rule 1403, all materials identified as ACMs would be removed by a trained and licensed asbestos abatement contractor. The asbestos removal operations would be conducted in accordance with CAL-OSHA Asbestos for the Construction Industry Standard, SCAQMD and EPA rules and regulations and industry standards. Thus, hazardous materials impacts relative to exposure to asbestos would be less than significant.

Regarding LBPs, a qualified lead-paint abatement consultant would be required to comply with applicable state and federal rules and regulations governing lead paint abatement. Such regulations that would be followed during demolition include Construction Safety Orders 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations.

Thus, with compliance with regulatory requirements, hazardous materials impacts caused by exposure to LBPs would be less than significant.

Based on the above, construction of the proposed Project would result in a less than significant impact with respect to the accidental release of hazardous materials.

(c) Soil Gases

As mentioned above, the generation of landfill gases has been evaluated and localized areas of methane gas have been detected within former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. As such, there is a possibility that ground-disturbing activities in this area could result in methane exposure to workers. However, as discussed above, each of these former disposal areas is subject to a Post-Closure Land Use Plan approved by the LEA. The Post-Closure Land Use Plan includes conditions to protect workers from methane exposure during work in the vicinity of these areas. In addition, Cal-OSHA regulates worker exposure to airborne contaminants (such as methane gas) during construction. All ground-disturbing activities occurring in the vicinity of Former Disposal Area 2 would be completed in a manner consistent the conditions of the Post-Closure Land Use Plans and with applicable Cal-OSHA regulations, which ensure consideration of worker safety during construction activities. Specifically, ground-disturbing activities within the vicinity of these areas would be monitored for the presence of methane gas. If methane levels are found to threaten worker safety, protection measures would be implemented in accordance with Cal-OSHA requirements. Therefore, impacts related to worker safety as it pertains to soil gases would be less than significant.

(d) Emergency Response Plans

The proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route.[4] Construction activities associated with the Project are not anticipated to require any temporary or permanent street closures. If street closures are required, such closures may cause temporary inconvenience along Forest Lawn Drive, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Therefore, construction

[4] *City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, Critical Facilities & Lifeline Systems in the City of Los Angeles, September 1996.*

activities associated with the Project would not be expected to interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(2) Operation

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

The Project has the potential to increase the acquisition, use, handling, storage and disposal of hazardous materials on-site through development of new facilities. All hazardous materials used and disposed of during operational activities would continue to be handled and disposed of in accordance with all applicable federal, state, and local regulations. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during operation to less-than-significant levels.

(b) Accidental Release of Hazardous Materials

As discussed above, the Project Site currently contains one 10,000-gallon UST containing unleaded gasoline and one 2,000-gallon UST containing diesel fuel at the fueling area. While no leaks are known to have occurred, USTs have the potential for accidental releases. As mentioned above, the operation and maintenance of the Project Site also involves the use of hazardous materials. These materials will continue to be properly stored and maintained. While accidental releases of hazardous materials associated with these sources is not anticipated, unanticipated accidental releases from the USTs or other source would involve notification of appropriate agencies, as well as necessary response actions in accordance with the requirements of applicable agencies. Therefore, potential impacts associated with the accidental release of potentially hazardous materials during Project operations would be less than significant.

(c) Soil Gases

As discussed above, the Project Site has four former disposal areas that were used primarily for green waste. The generation of landfill gases has been evaluated and localized methane gas has been detected within the former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. Similar to the potential impacts during Project construction, the potential presence of landfill gases presents a physical hazard that should be monitored when performing routine earthwork activities such as grading and excavation activities, as well as during interments, near or within the former disposal areas.

The City has approved Post-Closure Land Use Plans for the disposal areas. The Post-Closure Land Use Plans contain monitoring and mitigation requirements related to

development in the former disposal areas, including the continued monitoring of soil gas levels near the former disposal areas. The Project will comply with the requirements of the Post-Closure Land Use plans as required by the LEA. All ground-disturbing activities would be completed in accordance with the conditions of the Post-Closure Use Plans and all applicable Cal-OSHA regulations and requirements. These measures ensure consideration of worker safety during ground-disturbing activities by monitoring methane exposure and implementing protective measures when necessary. Therefore, with implementation of these measures, impacts would be reduced to less-than-significant levels.

The Project Site is located within a City of Los Angeles Methane Zone in accordance with Chapter IX, Division 71 of the LAMC (the City Methane Seepage Regulations). The City of Los Angeles Department of Building and Safety may require methane mitigation for new occupiable buildings constructed on the Project Site if it determines that a hazard may exist from methane intrusion. Prior to development of new occupiable buildings, the Project would comply with the City of Los Angeles Methane Seepage Regulations as required by the City Department of Building and Safety. With compliance with the post-closure use plans and requirements of the City of Los Angeles Department of Building and Safety, potential impacts associated with the accidental release of methane gas would be mitigated to a less-than-significant level.

(d) Emergency Response Plans

As previously stated, the proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route. Implementation of the Project is not anticipated to require any temporary or permanent street closures. If street closures are required, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Further, emergency vehicles have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, the Project would not be expected to require a new emergency response plan, interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(e) Pesticide Control

For common area landscaping in the commercial and park areas of Forest Lawn, an integrated pest management program would be incorporated. The goal of an integrated pest management program is to keep pest levels at or below threshold levels, reducing risk and damage from pest presence, while reducing the risk from the pest control methods used. Integrated pest management programs achieve these goals through the use of low

risk management options by emphasizing use of natural biological methods and the appropriate use of selective pesticides. Integrated pest management programs also incorporate environmental considerations by implementing procedures that minimize intrusion and alteration of biodiversity in ecosystems. Further, all pesticides would be handled, stored, and applied in accordance with applicable regulations and all manufacturer recommendations. In accordance with these requirements, the proposed Project would include source control measures such as education programs for employees in the proper application, storage, and disposal of pesticides that will be used at the Project Site. Therefore, implementation of the Integrated pest management plan and rodent control practices in accordance with the principles described above and the handling of all pesticides in accordance with all applicable regulations and recommendations would ensure the proposed Project would not result in a significant impact upon the environment.

4. Cumulative Impacts

Development of the proposed Project in combination with the related projects identified in Section III, Environmental Setting, would not have the potential to increase the risk for accidental release of hazardous materials. Each of the related projects would require evaluation for potential threats to public safety, including those associated with the accidental release of hazardous materials into the environment during construction and operation, emergency response, transport/use/disposal of hazardous materials, and hazards to sensitive receptors (including schools). Because hazardous materials and risk of upset conditions are largely site-specific, this would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Implementation of mitigation would reduce the proposed Project's potential impacts associated with hazardous materials/risk of upset to less-than-significant levels, such that the proposed Project would not combine with any of the related projects to cause a cumulatively significant impact. Further, each related project would be required to follow local, State, and federal laws regarding hazardous materials and other hazards. Therefore, with compliance with local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be less than significant.

5. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to hazardous materials and/or the risk of upset. Nonetheless, the following measure is recommended to further reduce any potential impacts:

Mitigation Measure IV.F-1: If soil contamination is suspected to be present, prior to excavation and grading, the South Coast Air Quality Management District's (SCAQMD) Rule 1166 shall be implemented, as

appropriate. If soil contamination is not suspected, but is observed (i.e., by sight, smell, visual, etc.) during excavation and grading activities, excavation and grading within such an area shall be temporarily halted and redirected around the areas until the appropriate evaluation and follow-up measures are implemented, as contaminated in SCAQMD's Rule 1166, so as to render the area suitable for grading activities to resume. The contaminated soil discovered shall be evaluated for grading activities to resume. The contaminated soil discovered shall be evaluated and excavated/disposed of, treated in-situ, or otherwise managed in accordance with all applicable regulatory requirements.

6. Level of Significance After Mitigation

With compliance with regulatory requirements, potential impacts associated with exposure to potentially hazardous materials would be less than significant. Nonetheless, the mitigation measure above has been proposed to ensure that specific regulatory requirements would be implemented.

IV. Environmental Impact Analysis

F. Hazardous Materials/Risk of Upset

1. Introduction

This section addresses hazardous materials and is based, in part, on the *Phase I Environmental Site Assessment Report* (Phase I ESA) prepared for the Project Site by Geosyntec Consultants (see Appendix F to this Draft EIR), which included background research, a geologic and hydrogeologic summary, records review, and site reconnaissance.

Hazardous materials are generally substances which by their nature and reactivity have the capacity to cause harm or a health hazard during normal exposure or an accidental release, and are characterized as being toxic, corrosive, flammable, reactive, an irritant or strong sensitizer. Activities and operations that use or manage hazardous or potentially hazardous substances, or that are located in areas where such substances exist, could create a hazardous situation if the release of these substances occurred. Individual circumstances, including the type of substance, quantity used or managed, and the nature of the activities and operations, affect the probable frequency and severity of the consequences from a hazardous situation. Federal, state and local laws regulate the use and management of hazardous or potentially hazardous substances.

2. Environmental Setting

a. Existing & Historical Uses of the Project Site

The Project Site is comprised of approximately 444 acres in the City of Los Angeles. The majority of the property, 410 acres, was originally approved by the City for cemetery use in 1948. Forest Lawn has operated a cemetery use at this location for approximately 60 years. The Project Site is currently developed with an administration building, a mortuary and flower shop, a chapel, a storage building, a garage and maintenance building, churches, an auditorium and museum, a columbaria, outdoor mausoleums, garden areas, interment sites and landscaped areas and roadways. An existing Los Angeles Department of Water and Power (LADWP) power line easement traverses the Project Site from northwest to southeast. The Project Site is also bisected by Sennett Creek, an existing concrete culvert drainage, a portion of which has been subject to habitat restoration efforts. Prior to 1948, uses at the Project Site included a ranch, film set, private

residence, horse track, and stables.[1] A former surface quarry that provided aggregate materials was operated on a 20.7-acre area in the southwestern portion of the Project Site by Mid-City Granite from 1969 to 1994; however, starting in 1994, Forest Lawn "reclaimed" the mining area pursuant to an approved reclamation plan. The reclamation was completed and approved by the local and state agencies in 2006.

Additionally, there are four known former disposal areas on the Project Site. These areas include a Caltrans disposal area, a closed 2.5-acre disposal area, and two other former disposal areas (referred to as "Former Disposal Area 1" and "Former Disposal Area 2"). The Caltrans disposal area borders Forest Lawn Drive and the adjacent Mount Sinai Memorial Park. This disposal area was used by Caltrans to dispose of inert construction debris during the construction of the US 101 Freeway in the early 1960s. The remaining three disposal areas were used by Forest Lawn to dispose of inert waste, primarily consisting of green waste (e.g., tree branches, floral arrangements, etc.), generated during cemetery operations. No hazardous waste is known to have been disposed of at the former disposal areas. All four former disposal areas have been closed and have approved Post-Closure Land Use Plans. The proposed Project's development areas would occur within the vicinity of the former 2.5-acre disposal area and Former Disposal Area 2.

b. Surrounding Uses

The Project Site is immediately bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel, the SR-134 Freeway, Mount Sinai Memorial Park, and the administrative offices of the Junior Achievement Foundation on the north and northeast; Griffith Park, including the Toyon Landfill, and the Santa Monica Mountains on the south and east; and by contiguous undeveloped land owned by the Forest Lawn Memorial-Park Association to the west. Surrounding land uses beyond the SR-134 Freeway to the north include residences, a park, a hospital, the Disney Studios, the ABC Studio office buildings, and the Warner Brothers Studios lot, which are all located within the City of Burbank. For purposes of this analysis, the following land uses surrounding the Project Site are identified as sensitive receptors with respect to hazardous material exposure:(1) Buena Vista Park at the southeast corner of Riverside Drive and Bob Hope Street, approximately 0.08 miles north of the Project Site; (2) Johnny Carson Park at the northeast corner of Riverside Drive and Bob Hope Street, approximately 0.19 miles north of the Project Site; (3) Providence High School at 511 S. Buena Vista Street, approximately 0.13 miles north of the Project Site; (4) Providence St. Joseph's Medical Center at 501 S. Buena Vista Street, approximately 0.28 miles north of the Project Site; (5) single-family residences

[1] *Historical Resources Assessment of the Forest Lawn Memorial Park, LSA Associates, October 2008*

approximately 0.07 miles northwest of the Project Site; and (6) single-family residences approximately 0.30 miles north of the Project Site.

c. Geology and Topography of the Project Site

The Project Site is located near the northeastern end of the Santa Monica Mountains. The Project Site occupies the south margin of a small valley that drains north to northwest from Cahuenga Peak toward the Los Angeles River Flood Control Channel. Elevations range from approximately 505 feet above mean sea level (MSL) in the northwestern portion of the Project Site to approximately 1,000 feet above MSL in the southern portion of the Project Site.

The Santa Monica Mountains comprise the southern edge of the central Transverse Ranges geomorphic province, south of which lies the Peninsular Ranges province. The Transverse Ranges comprise a series of moderate- to high-elevation ranges and adjacent valleys, exhibiting east-west structural trends, contrary to the general northwest structural trend of the remainder of the state. The ranges include the Santa Monica Mountains and adjacent San Gabriel Mountains.

The eastern portion of the Project Site overlies recompacted fill material, recent alluvium/colluvium in drainages, and bedrock of the Miocene Topanga Formation. Fill material consists of silty to clayey sand and sandy clay with minor gravel, refuse and organic matter. Alluvium/colluvium consists of clayey sand interbedded with silty sand and stringers of pea gravel. The Topanga formation generally consists of three members, separated by unconformities: (1) a basal marine conglomeratic sandstone up to 328 feet thick, (2) a dominantly basaltic middle unit of multiple submarine lava flows and tuffs as much as about 2,198 feet thick, and (3) an upper unit of sedimentary breccia, conglomerate, sandstone, and siltstone that probably exceeds 3,281 feet in thickness and locally contains marine fossils. At the Project Site, the Topanga Formation consists of highly weathered, micaceous, clayey sandstone, siltstone, and shale.

d. Hydrogeology of the Project Site

The Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. However, the clayey alluvium and Topanga Formation and the diorite bedrock beneath and near the Project Site are expected to exhibit relatively low hydraulic conductivity, and are not expected to transmit significant volumes of water.

Groundwater at the Project Site was previously measured at depths ranging from approximately 23 feet below ground surface (bgs) in the eastern portion of the Project Site to over 58 feet bgs along the boundary with Mount Sinai Memorial Park. Because of reported heavy rainfall during the time of drilling for those previous measurements, the measured stabilized groundwater levels are expected to represent a high groundwater condition. Calculated groundwater elevations from historical data suggest a general groundwater flow direction to the north-northwest.

e. Existing Hazardous Materials Conditions

(1) Records and Database Search for Project Site

A database search report was obtained from Environmental Data Resources, Inc., and is included as an appendix to the Phase I ESA, which is included as Appendix F to this Draft EIR. The report documents findings of various federal, state and local regulatory database searches regarding properties with known or suspected releases of hazardous materials or petroleum hydrocarbons.

The Project Site is listed as a small quantity generator on the Resource Conservation and Recovery Act Small Quantity Generator (RCRA-SQG) and the HAZNET databases for disposal of small quantities of waste oil, asbestos-containing waste, and other inorganic solid and liquid wastes. The Project Site is also listed on the National Pollutant Discharge Elimination System (NPDES) and California Waste Discharge System (CA WDS) databases because it has been issued a waste discharge requirement for stormwater runoff. However, in October 2009, the State Water Resources Control Board (SWRCB) approved a Notice of Termination indicating that the Project Site was no longer required to comply with the Industrial Activities Storm Water General Permit (NPDES Permit No. 97-03-DWQ) because the Project Site had discontinued its concrete batch operations.

The Project Site is listed on several databases for underground storage tanks (USTs). According to the databases, there were 3 USTs at the Site: one 10,156-gallon tank for regular unleaded fuel installed in 1950, one 10,220-gallon tank for regular fuel installed in 1955, and one 2,040-gallon tank with unknown contents. These USTs were removed and the cases were closed with agency oversight as discussed in more detail below. The former Mid City Granite facility is shown in the databases to have contained USTs in the past. The Mid City Granite facility reclamation was completed and approved by the local and state agencies in 2006.

The Project Site is also listed on the Solid Waste Information System (SWIS) database for a closed, unpermitted solid waste disposal site (i.e., the 2.5-acre former landfill) that is inspected quarterly.

(2) Records and Database Search for Surrounding Area

Approximately 72 properties were identified within 1 mile of the Project Site. One of these facilities, the Mount Sinai Memorial Park, is located immediately northeast of the Project Site. Mount Sinai Memorial Park adjoins the northeast side of the Project Site. Mount Sinai Memorial Park is listed on several databases because there is an active UST investigation, historical USTs and the property is a small quantity generator of hazardous wastes. However, the Mount Sinai facility is located at a lower elevation than the Site (down-gradient in groundwater flow terms) and, therefore, has a limited potential to affect the Project Site.

Up-gradient facilities, those at a higher elevation than the site, may pose a hazard to the Project Site if the facility is an active/open facility and groundwater flows toward the site. The Mt. Lee Communication Center is located approximately 1,700 feet south of the Project Site and is listed on several databases for a release of diesel fuel that reportedly affected only soil. The spill was reported on December 15, 1992, and the case was closed on October 5, 1995. The facility is also listed as a small quantity generator “with no violations”. Based on the distance of this facility from the Site, the fact that the diesel fuel release reportedly only resulted in affected soil, and that the case is closed, adverse impacts to the Project Site are not likely.

The Toyon Canyon Landfill, is located at a higher elevation (i.e., hydraulically up-gradient) than the Site, but is a closed and monitored landfill. The Toyon Canyon Landfill is approximately 1,100 feet east of the Site. According to the California Integrated Waste Management Board (CIWMB), this landfill is a permitted, closed, solid waste disposal site owned by the City of Los Angeles Bureau of Sanitation. The landfill is reportedly inspected quarterly, but no other information was available. Although insufficient information is available to evaluate the nature of the potential impacts associated with the landfill, based on the distance of this property from the Site, and its closed and monitored status, adverse impacts to the Project Site are not likely.

The remaining 69 facilities are at a far enough distance from the Project Site and are at a lower elevation (i.e., hydraulically down-gradient) than the Site, and are unlikely to affect the Project Site.

The Project Site is located just outside the boundaries of the San Fernando Valley Area 2 (Crystal Springs Area) NPL site in which the regional groundwater is contaminated

with various volatile organic compounds (VOCs), primarily trichloroethylene (TCE) and tetrachloroethylene (PCE). Area 2 covers approximately 3,975 acres and the groundwater within the unit is used as a source of drinking water. Assessment of the San Fernando Valley Area 2 NPL site began in the 1980s and is ongoing. The current radius map indicates that the Area 2 NPL boundary is approximately 0.5 mile north of the Project Site According to the database search report, Forest Lawn is not a Potentially Responsible Party to the NPL site.

No other properties within one mile of the Project Site were identified as having the potential to affect the Project Site. For a full listing of properties identified within a one mile radius of the Project Site, please refer to the Phase I ESA included as Appendix F to this Draft EIR.

(3) Summary of Previous Investigations

The following is a summary of prior investigations conducted at the Project Site based on documents reviewed at various state and local agencies, such as the Los Angeles Regional Water Quality Control Board (LARWQCB) and the City of Los Angeles Fire Department (LAFD), and the Phase I ESA preparer's knowledge of the Project Site.

(a) Underground Storage Tanks (USTs)

According to records obtained from the LAFD, there were 3 historic USTs at the Project Site: one approximately 10,000-gallon single-wall steel UST for gasoline fuel installed in 1950 at the administrative and mortuary building, one approximately 10,000-gallon single-wall steel UST for gasoline installed in 1955 in the maintenance yard, and one approximately 1,000-gallon steel UST for diesel fuel located in the southeastern portion of the Project Site.

The two approximately 10,000-gallon gasoline USTs were removed from the Project Site in November 1990. According to the tank removal report, both tanks were intact with only minor rusting when they were removed. The dispenser lines associated with these tanks were later removed in February 1991. Subsequent to the removal of the two USTs and their dispenser lines, soil samples were taken. Total petroleum hydrocarbons (TPH) were initially detected in the soil samples collected beneath the dispensers for the tank in the maintenance yard at concentrations up to 2,067 mg/kg. TPH was not detected in other samples. Subsequent soil samples in the vicinity of the dispensers detected TPH in the five-foot sample of one boring at a concentration of 12mg/kg. Benzene, toluene, ethylbenzene, xylenes, and lead were not detected in any of the samples. Based on the results of these additional soil samples, a No Further Action letter was issued by the LAFD in December 1991.

The 1,000-gallon diesel fuel UST was removed from the Project Site in September 1988. One soil sample was collected from 2 feet below the removed tank and was found to contain 3 mg/kg of total recoverable petroleum hydrocarbons (TRPH). No additional assessment was required.

Current USTs at the Project Site include one approximately 10,000-gallon double walled steel UST for unleaded gasoline and one approximately 2,000-gallon UST for diesel. Both USTs were installed in 1990 within the maintenance yard and have a leak detection system. There is also a South Coast Air Quality Management District (SCAQMD) permit to operate an above-ground fuel pumping station associated with the 10,000-gallon gasoline UST.

(b) Well Investigation Program (WIP)

In April 1990, in response to the presence of organic contaminants in nearby drinking-water wells, (part of the San Fernando Valley NPL site) the LARWQCB sent Forest Lawn a chemical storage and use questionnaire. In August 1995, the Project Site was inspected by the LARWQCB. Based on the responses from the questionnaire and the site inspection, a No Further Action letter was sent to Forest Lawn by the US Environmental Protection Agency (EPA) in May 1996.

(c) Former Disposal Areas

(i) Former 2.5-Acre Landfill Area

As described above, an approximately 2.5-acre former landfill area is located on the northeastern portion of the Project Site near Mount Sinai Memorial Park. The landfill area received organic material (primarily grass clippings, flowers, floral arrangements, tree clippings, etc.) and cover soil during its operation. Borings drilled in the area of the landfill indicated that the depth of the waste fill ranged from 4 to 34 feet bgs. The 2.5-acre landfill area ceased operations in August 1984. In 1985, a landfill closure plan was approved by the Los Angeles Board of Public Works.

As part of the approved landfill closure plan, four gas monitoring wells, one groundwater monitoring well, and one dual completion groundwater and gas monitoring well were installed in 1986. In addition, a drainage interceptor ditch was installed to convey stormwater from upslope areas around the disposal area. Additional perimeter gas monitoring wells were installed in 1996.

Groundwater in the monitoring well was encountered at approximately 27 to 30 feet bgs. Initial sampling of the groundwater monitoring wells indicated the groundwater contained total organic carbon up to 20 mg/L and total dissolved solids up to 1800 mg/L.

Phenols and total organic halides were not detected above the method detection limit. Initial sampling of the gas monitoring wells indicated combustible gases present up to 35 percent by volume along the boundary with Mount Sinai Memorial Park. Quarterly monitoring of the groundwater and gas wells was conducted from approximately June 1986 until approximately July 1995. Quarterly monitoring of the gas wells continued until 1999. According to the quarterly reports between 1994 and 1999, landfill gas was not detected in the perimeter gas monitoring wells.

A post closure use plan for the landfill area was submitted in January 1997. In accordance with the post closure use plan, fill material with a minimum thickness of 15 feet was placed above the landfill area. The landfill area is still inspected quarterly by the City of Los Angeles. Two perimeter gas monitoring wells were observed during the site reconnaissance performed for this Project's Phase I ESA and are monitored quarterly.

(ii) Former Caltrans Disposal Area

As described above, the former Caltrans disposal area is located at the northeast corner of the Project Site and extends across the boundary of the Project Site and into Mount Sinai Memorial Park. The Caltrans disposal area also partially overlaps the 2.5-acre landfill area described above. Caltrans reportedly used the land as a disposal area for inorganic construction debris from the construction of nearby freeways in the early 1960s. The Caltrans disposal area was reportedly encountered at approximately 7.5, 20, and 31.5 feet bgs during the drilling of borings associated with the 2.5-acre disposal area.

(iii) Former Disposal Area 1

Former Disposal Area 1 is located in the southern portion of the Project Site. Former Disposal Area 1 was once transected by a gully that appears to have been filled with green waste (i.e., tree branches, floral arrangements, etc.) from approximately 1952 through 1959. In May 2006, discolored soil and wooden debris was discovered by Forest Lawn in Former Disposal Area 1.

As a result of this discovery, various soil and soil gas investigations were performed between May 2006 and October 2006. Environmental analyses indicated that the samples collected from the discolored soil did not contain detectable concentrations of TPH, VOCs, semi-volatile organic compounds, fecal coliform, polynuclear aromatic hydrocarbons, pesticides, herbicides, asbestos or PCBs. In addition, the soil samples did not contain concentrations of metals, including aluminum and hexavalent chromium, above the EPA Region 9 Preliminary Remediation Goals (PRGs) for industrial soil. VOCs and TPHs were not detected in the soil gas samples collected. Methane was detected in 16 of the 25 soil gas samples. In general, the methane concentrations significantly declined to the east and west of the historical gully, suggesting that methane concentrations are localized within the

area of the historical gully. The source of the methane and discolored soil appeared to be decomposition of green waste that was filled into the historical gully.

A Post-Closure Land Use Plan was approved by the Local Enforcement Agency ("LEA") in July 2007, with conditions relating to interment and worker safety conditions. Two gas monitoring probes were installed and monitored quarterly for one year and then abandoned with the LEA's permission. Former Disposal Area 1 is now a grass-covered lawn.

(iv) Former Disposal Area 2

Former Disposal Area 2 is located in the southeastern portion of the Project Site and was used from the 1950s through the 1970s for disposal of various wastes associated with the use of the Project Site. The disposal area filled in a natural canyon, with interlayers of wastes and native soil and an approximately 10-foot soil cap.

In 2006, soil gas samples were collected from 18 locations within and surrounding the estimated footprint of the former disposal area. Methane was detected in all soil gas samples and ranged in concentration from 0.0041 percent to 70 percent by volume. The highest methane concentrations were detected along the eastern and southern portions of the former disposal area. Methane was detected in concentrations from 38 percent to 49 percent just outside the eastern and southeastern boundary of the estimated footprint, suggesting methane is migrating in these directions. VOCs were detected only in one soil gas sample for dichlorodifluoromethane at a concentration of 2.6 micrograms per liter (µg/L). Hydrogen sulfide concentrations ranged from background (i.e., less than 0.005 parts per million (ppm)), to 2.7 ppm.

The LEA approved a Post-Closure Land Use Plan for Former Disposal Area 2 in 2009. The approval required the installation of new landfill gas probes as well as requirements for interment fill and worker safety.

(d) Hazardous Materials Usage

According to the Phase I ESA, the following hazardous materials are used or generated at the Project Site: oils and lubricants, fuels, waste oil, antifreeze, welding gases, aerosol paints, adhesives, floral sprays, various cleaning supplies, and preservation fluids such as formaldehyde. Most of the on-site hazardous substances are located in the maintenance yard, at which the following hazardous substances were observed:

- One 10,000-gallon UST containing unleaded gasoline, one 2,000-gallon UST containing diesel fuel, and a dispenser island at the fueling area;

- Lubricating oil, waste lubricating oil, 2-cycle oil, transmission fluid and grease;
- Antifreeze and waste antifreeze;
- A propane tank;
- Fertilizer and pre-emergent herbicide;
- Flammable liquid storage;
- Various gases;
- Portland Cement.

In addition, Forest Lawn employs pest control contractors to apply pesticides around buildings on a monthly basis. The pest control contractors are licensed by the State of California Department of Health Services and the contractor stores its landscaping supplies off-site. Forest Lawn applies a pre-emergent herbicide as part of its lawn maintenance. As mentioned above, the pre-emergent herbicide is stored in the maintenance yard.

Transformers are located throughout the Project Site and can contain Polychlorinated biphenyls (PCBs). All transformers were observed to be in good condition and no leaks or staining was observed during the Phase I ESA site reconnaissance. No evidence of electrical transformers containing PCBs was identified during the site reconnaissance or interviews with Forest Lawn staff.

During the site reconnaissance, all hazardous materials were found to be adequately contained and stored within secondary containment and no staining or indication of past release is associated with the use of these materials.

A masonry facility was formerly located north of the Maintenance Yard. As mentioned above, this facility has been removed and is currently an open, grassy area. An acid pH adjustment was used for liquids in the 4-stage clarifier when the plant was in operation, but has since been removed.

(e) Hazardous Waste

Forest Lawn generates hazardous and non-hazardous waste as a result of vehicle maintenance and general operations throughout the year. Waste generated and disposed of since 2004 has included: non-Resource Conservation and Recovery Act (RCRA) waste oil; non-RCRA antifreeze; Safety Kleen brake cleaner; Safety Kleen aqueous parts wash; waste absorbent material; non-hazardous clarifier waste; and waste oil filters and pump-out fluids.

(f) Asbestos Containing Materials (ACMs) and Lead-Based Paint (LBP)

ACMs are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. ACM is generally defined as either friable or non-friable. ACM is defined as any material containing more than one percent asbestos. Friable ACM is more likely to produce airborne fibers than non-friable ACM, and can be crumpled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is defined as any material containing one percent or more asbestos that cannot be crumpled, pulverized, or reduced to powder by hand pressure. When left intact and undisturbed, ACM does not pose a health risk to building occupants. Potential for human exposure only occurs when ACM becomes damaged or actively worked (e.g., drilled, sanded, scraped, etc.) to the extent that asbestos fibers become airborne and can be inhaled. These airborne asbestos fibers are carcinogenic and can cause lung disease.

LBP, which can result in lead poisoning when consumed or inhaled, was widely used prior to 1950 to coat and decorate buildings. Lead compounds continued to be used as corrosion inhibitors, pigments and drying agents until 1978. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACM, LBP generally does not pose a health risk to building occupants when left undisturbed; however, deterioration, damage, or disturbance can result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, only buildings built before 1978 are presumed to contain LBP, as well as buildings built shortly thereafter, as the phase-out of LBP was gradual.

Most of the existing structures on the Project Site were built prior to 1970 and may contain ACMs and/or LBPs. In compliance with state and federal laws, a notice of the presumed and known ACMs is provided annually by Forest Lawn to all employees and contractors. A list of the presumed and known lead-containing materials was provided by Forest Lawn and is included in Appendix H to the Phase I ESA included as Appendix F to this Draft EIR.

(g) Other Observations

Minor staining was observed in the vicinity of the air compressor in the Maintenance Yard and around the backup generator in the administration and & mortuary area.

f. Regulatory Environment

Many agencies are involved with the regulation of hazardous materials use. At the federal level, these include the EPA and the Occupational Safety and Health Administration (OSHA). State agencies, including the Department of Toxic Substances Control (DTSC), have parallel (and in some cases more stringent) rules governing the use of hazardous

materials. The LAFD is the local regulating body for hazardous materials, due to the passage of Assembly Bills 2185 and 2187, which require disclosure of the use and storage of hazardous materials that could lead to public exposure to these substances. In addition to the laws governing the use of hazardous materials, federal and state laws also regulate the generation, transportation, and disposal of hazardous wastes. At the federal level, the principal regulatory agency is the EPA. Within the state, DTSC has primary regulatory responsibility for disposal of hazardous waste.

(1) Asbestos and Lead

The EPA established National Emission Standards for Hazardous Air Pollutants (NESHAP) that govern the use, removal, and disposal of ACMs. Implementation of the NESHAP requirements has been delegated to the SCAQMD, which implements it through Rule 1403. Rule 1403 sets forth regulations and procedures for the identification, notification, removal and disposal of ACMs. Friable asbestos waste is considered a hazardous waste by the state of California and must be disposed of in an EPA-approved landfill. Owners of pre-1979 buildings known to contain ACMs are required to prepare an asbestos management plan. The California Occupational Safety and Health Administration (Cal-OSHA) regulates ACMs and LBPs as they relate to employee safety. In addition, OSHA has established safety levels for exposure to lead during construction activities. As discussed in greater detail below, the use of ACMs and LBPs in new building materials was prohibited under the Toxic Substances Control Act (TSCA) of 1976.

(2) Storage Tanks

USTs are subject to regulation under the RCRA, 42 USC 6991, and 40 Code of Federal Regulations (CFR) 280. At the state level, the storage of hazardous materials in USTs is regulated by the SWRCB. Authority for hazardous materials is delegated to the local level through the LARWQCB and the LAFD. The LAFD administers and enforces Federal and State laws, as well as local ordinances for USTs.

(3) Hazardous Waste

RCRA was enacted in 1976 and mandated a national waste management program. Under RCRA regulations, established by the EPA, hazardous waste must be tracked from the time of generation to the point of disposal. RCRA also sets out standards for hazardous waste treatment, storage, and disposal units. The EPA delegated implementation of the RCRA program to the State of California Environmental Protection Agency's (CalEPA) DTSC. In addition, the State of California has implemented an additional level of regulation for waste materials that are not subject to federal hazardous waste regulations through the California Hazardous Waste Control Law. In addition, OSHA

regulations contain worker safety provisions with respect to hazardous waste management operations and emergency responses involving hazardous waste.

(4) Hazardous Materials

Hazardous materials have certain chemical, physical, or biological properties that cause them to be considered hazardous to human health or the environment. Federal occupational safety and health regulations of the OSHA contain provisions with respect to hazardous materials management. The California Occupational Safety and Health Administration (Cal-OSHA) also requires preparation of an Injury and Illness Prevention Program which is an employee safety program of inspections, procedures, training and communication.

The Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the California Hazardous Substance Account Act require reporting of certain releases of hazardous substances from specified facilities and set forth response actions for National Priority List sites.

Established in 1976 and amended in December 31, 2002, by the EPA, the TSCA of 1976 grants the EPA power to require proper reporting, record-keeping, and testing requirements relating to chemical substances and/or mixtures. Specifically, the TSCA addresses the production, importation, use and disposal of specific chemicals including PCBs, asbestos, radon, and LBPs.[2] The TSCA establishes the EPA's authority to require the notification of the use of chemicals, require testing, maintain a TSCA inventory, and require those importing chemicals under Section 12 (b) and 13 to comply with certification and/or other reporting requirements. This Federal legislation also phased out the use of PCBs, ACMs, and LBPs in new building materials, and sets requirements for the use, handling, and disposal of these materials. For example, the disposal standards for LBPs wastes are detailed under Section 402(a)(1).

(5) Worker Safety

Cal-OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace, including ACMs and LBP. Cal-OSHA standards are generally more stringent than federal OSHA regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure.

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[2] *Summary of the Toxic Substances Control Act, available at http://www.epa.gov/lawsregs/laws/tsca.html, accessed May 2010.*

The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. OSHA standards also include standards regarding safe exposure limits for chemicals to which construction workers may be exposed, including methane (Safety and Health Regulations for Construction (29 CFR Section 1926.65, Appendix C).

(6) Pesticide Use

The Federal Insecticide, Fungicide, and Rodenticide Act establishes regulations for the proper use, storage, and disposal of pesticides. Pesticide management activities are subject to Federal regulations contained in 40 CFR Sections 162, 165, 166, 170, and 171. In addition, the OSHA Hazard Communication regulations require that a Material Safety Data Sheet (MSDS) be prepared for potentially harmful substances, including pesticides. The MSDS includes instructions for the proper handling, storage, and disposal of each individual pesticide.

(7) Disposal Sites and Methane Gas

Pursuant to the California Code of Regulations (CCR), the local enforcement agencies (LEAs) have oversight of disposal site post closure land uses (27 CCR Section 21190). Cal-OSHA regulates worker exposure to airborne contaminants (such as methane gas) during construction under Title 8, Section 5155,

The Project Site is located in an identified City of Los Angeles Methane Zone.[3] Chapter IX, Article 1, Division 71 of the LAMC (Los Angeles Methane Seepage Regulations), designates Methane Zone and Methane Buffer Zones and establishes requirements for projects located within a Methane Zone or Methane Buffer Zone.

3. Environmental Impacts

a. Methodology

To assist in evaluating the potential impacts associated with hazards and hazardous materials that could occur as a result of construction and/or operation of the proposed Project, a Phase I ESAs was prepared by Geosyntec Consultants in September 2010. The Phase I ESA includes a review of historical aerial photographs and maps, a review of

[3] *City of Los Angeles Department of Building and Safety, Parcel Profile Report: 6300 West Forest Lawn Drive, generated May 28, 2010.*

relevant hazardous materials databases, and site reconnaissance to determine if any recognized environmental concerns. Please refer to Appendix F of this Draft EIR for a copy of Phase I ESA.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides screening questions that address impacts with regard to hazards and hazardous materials. These questions are as follows:

Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* provides that the determination of significance with respect to risk of upset/emergency preparedness shall be made on a case-by-case basis, considering the following factors:

- The regulatory framework;
- The probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance;
- The degree to which the project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences; and
- The degree to which project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance.

Based on these factors, the proposed Project would have a significant impact if it were to expose people to a substantial risk resulting from the release or explosion of hazardous material, or from exposure to a health hazard in excess of regulatory standards. Additionally, the proposed Project would have a significant impact if it would require a new, or interfere with an existing, emergency response plan.

c. Analysis of Project Impacts

Following is a discussion of the Project's impacts during construction and operation with respect to hazardous materials and risk of upset. The proposed Project seeks approval to construct approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. It is estimated that over a 15-year construction period, approximately 2.7 million cubic yards of earth would be graded. Net export during grading will be approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt will be exported in connection with grave preparation from 2011 to 2050. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. Additionally, the construction process may also result in the demolition of structures that may contain ACMs and or LBP.

(1) Construction

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

During the demolition of existing structures and grading/excavation phases, the Project may involve the hauling, routine transport and disposal of potentially hazardous materials, including ACMs, LBPs, oils and lubricants, fuels, waste oil, paints, and

adhesives. All hazardous materials encountered or used during demolition, grading/ excavation, and construction activities, including ACMs and LBP, would be handled in accordance with all applicable federal, state, and local regulations, which include requirements for proper handling and disposal of hazardous materials. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during construction to less-than-significant levels.

(b) Accidental Release of Hazardous Materials

There is the potential for on-site grading to encounter contaminated soil or disturb known or unknown underground structures, such as USTs, which could lead to soil and/or groundwater impacts and the potential exposure of people and the environment to hazardous materials. However, any previously unidentified contaminated soil that is encountered and determined unsuitable for fill material would be handled in accordance with all applicable local, State, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste, based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. As a result, if impacted soils or structures such as USTs are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards.

Many of the on-site structures were constructed prior to the ban on ACMs and LBPs in new building materials, including the Maintenance Office and Maintenance Building. As such, the renovation and/or removal of these buildings could expose workers to ACMs and/or LBPs still present in the buildings, representing a potential environmental hazard to workers.

In accordance with SCAQMD's Rule 1403, a complete survey would be conducted prior to any demolition activities to identify all sources of ACMs. In accordance with the EPA's NESHAP regulation and SCAQMD's Rule 1403, all materials identified as ACMs would be removed by a trained and licensed asbestos abatement contractor. The asbestos removal operations would be conducted in accordance with CAL-OSHA Asbestos for the Construction Industry Standard, SCAQMD and EPA rules and regulations and industry standards. Thus, hazardous materials impacts relative to exposure to asbestos would be less than significant.

Regarding LBPs, a qualified lead-paint abatement consultant would be required to comply with applicable state and federal rules and regulations governing lead paint abatement. Such regulations that would be followed during demolition include Construction Safety Orders 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations.

Thus, with compliance with regulatory requirements, hazardous materials impacts caused by exposure to LBPs would be less than significant.

Based on the above, construction of the proposed Project would result in a less than significant impact with respect to the accidental release of hazardous materials.

(c) Soil Gases

As mentioned above, the generation of landfill gases has been evaluated and localized areas of methane gas have been detected within former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. As such, there is a possibility that ground-disturbing activities in this area could result in methane exposure to workers. However, as discussed above, each of these former disposal areas is subject to a Post-Closure Land Use Plan approved by the LEA. The Post-Closure Land Use Plan includes conditions to protect workers from methane exposure during work in the vicinity of these areas. In addition, Cal-OSHA regulates worker exposure to airborne contaminants (such as methane gas) during construction. All ground-disturbing activities occurring in the vicinity of Former Disposal Area 2 would be completed in a manner consistent the conditions of the Post-Closure Land Use Plans and with applicable Cal-OSHA regulations, which ensure consideration of worker safety during construction activities. Specifically, ground-disturbing activities within the vicinity of these areas would be monitored for the presence of methane gas. If methane levels are found to threaten worker safety, protection measures would be implemented in accordance with Cal-OSHA requirements. Therefore, impacts related to worker safety as it pertains to soil gases would be less than significant.

(d) Emergency Response Plans

The proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route.[4] Construction activities associated with the Project are not anticipated to require any temporary or permanent street closures. If street closures are required, such closures may cause temporary inconvenience along Forest Lawn Drive, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Therefore, construction

[4] *City of Los Angeles Department of City Planning, Environmental and Public Facilities Maps, Critical Facilities & Lifeline Systems in the City of Los Angeles, September 1996.*

activities associated with the Project would not be expected to interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(2) Operation

(a) Routine Transport, Use, or Disposal of Potentially Hazardous Materials

The Project has the potential to increase the acquisition, use, handling, storage and disposal of hazardous materials on-site through development of new facilities. All hazardous materials used and disposed of during operational activities would continue to be handled and disposed of in accordance with all applicable federal, state, and local regulations. Adherence to all applicable rules and regulations would reduce potentially significant impacts with respect to routine transport, use, and disposal of hazardous materials during operation to less-than-significant levels.

(b) Accidental Release of Hazardous Materials

As discussed above, the Project Site currently contains one 10,000-gallon UST containing unleaded gasoline and one 2,000-gallon UST containing diesel fuel at the fueling area. While no leaks are known to have occurred, USTs have the potential for accidental releases. As mentioned above, the operation and maintenance of the Project Site also involves the use of hazardous materials. These materials will continue to be properly stored and maintained. While accidental releases of hazardous materials associated with these sources is not anticipated, unanticipated accidental releases from the USTs or other source would involve notification of appropriate agencies, as well as necessary response actions in accordance with the requirements of applicable agencies. Therefore, potential impacts associated with the accidental release of potentially hazardous materials during Project operations would be less than significant.

(c) Soil Gases

As discussed above, the Project Site has four former disposal areas that were used primarily for green waste. The generation of landfill gases has been evaluated and localized methane gas has been detected within the former disposal areas. The proposed Project's development areas are located within the vicinity of Former Disposal Area 2. Similar to the potential impacts during Project construction, the potential presence of landfill gases presents a physical hazard that should be monitored when performing routine earthwork activities such as grading and excavation activities, as well as during interments, near or within the former disposal areas.

The City has approved Post-Closure Land Use Plans for the disposal areas. The Post-Closure Land Use Plans contain monitoring and mitigation requirements related to

development in the former disposal areas, including the continued monitoring of soil gas levels near the former disposal areas. The Project will comply with the requirements of the Post-Closure Land Use plans as required by the LEA. All ground-disturbing activities would be completed in accordance with the conditions of the Post-Closure Use Plans and all applicable Cal-OSHA regulations and requirements. These measures ensure consideration of worker safety during ground-disturbing activities by monitoring methane exposure and implementing protective measures when necessary. Therefore, with implementation of these measures, impacts would be reduced to less-than-significant levels.

The Project Site is located within a City of Los Angeles Methane Zone in accordance with Chapter IX, Division 71 of the LAMC (the City Methane Seepage Regulations). The City of Los Angeles Department of Building and Safety may require methane mitigation for new occupiable buildings constructed on the Project Site if it determines that a hazard may exist from methane intrusion. Prior to development of new occupiable buildings, the Project would comply with the City of Los Angeles Methane Seepage Regulations as required by the City Department of Building and Safety. With compliance with the post-closure use plans and requirements of the City of Los Angeles Department of Building and Safety, potential impacts associated with the accidental release of methane gas would be mitigated to a less-than-significant level.

(d) Emergency Response Plans

As previously stated, the proposed Project is located on Forest Lawn Drive, a City-designated selected disaster route. Implementation of the Project is not anticipated to require any temporary or permanent street closures. If street closures are required, such activities would be short-term in nature and would not be expected to substantially interfere with peak-hour traffic, emergency response or evacuation plans involving the use of Forest Lawn Drive. In addition, the proposed Project would be required to maintain appropriate fire and police access to the Project Site during construction. Further, emergency vehicles have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, the Project would not be expected to require a new emergency response plan, interfere with any adopted emergency response plan or emergency evacuation plan, and no impact would occur.

(e) Pesticide Control

For common area landscaping in the commercial and park areas of Forest Lawn, an integrated pest management program would be incorporated. The goal of an integrated pest management program is to keep pest levels at or below threshold levels, reducing risk and damage from pest presence, while reducing the risk from the pest control methods used. Integrated pest management programs achieve these goals through the use of low

risk management options by emphasizing use of natural biological methods and the appropriate use of selective pesticides. Integrated pest management programs also incorporate environmental considerations by implementing procedures that minimize intrusion and alteration of biodiversity in ecosystems. Further, all pesticides would be handled, stored, and applied in accordance with applicable regulations and all manufacturer recommendations. In accordance with these requirements, the proposed Project would include source control measures such as education programs for employees in the proper application, storage, and disposal of pesticides that will be used at the Project Site. Therefore, implementation of the Integrated pest management plan and rodent control practices in accordance with the principles described above and the handling of all pesticides in accordance with all applicable regulations and recommendations would ensure the proposed Project would not result in a significant impact upon the environment.

4. Cumulative Impacts

Development of the proposed Project in combination with the related projects identified in Section III, Environmental Setting, would not have the potential to increase the risk for accidental release of hazardous materials. Each of the related projects would require evaluation for potential threats to public safety, including those associated with the accidental release of hazardous materials into the environment during construction and operation, emergency response, transport/use/disposal of hazardous materials, and hazards to sensitive receptors (including schools). Because hazardous materials and risk of upset conditions are largely site-specific, this would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Implementation of mitigation would reduce the proposed Project's potential impacts associated with hazardous materials/risk of upset to less-than-significant levels, such that the proposed Project would not combine with any of the related projects to cause a cumulatively significant impact. Further, each related project would be required to follow local, State, and federal laws regarding hazardous materials and other hazards. Therefore, with compliance with local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be less than significant.

5. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to hazardous materials and/or the risk of upset. Nonetheless, the following measure is recommended to further reduce any potential impacts:

Mitigation Measure IV.F-1: If soil contamination is suspected to be present, prior to excavation and grading, the South Coast Air Quality Management District's (SCAQMD) Rule 1166 shall be implemented, as

appropriate. If soil contamination is not suspected, but is observed (i.e., by sight, smell, visual, etc.) during excavation and grading activities, excavation and grading within such an area shall be temporarily halted and redirected around the areas until the appropriate evaluation and follow-up measures are implemented, as contaminated in SCAQMD's Rule 1166, so as to render the area suitable for grading activities to resume. The contaminated soil discovered shall be evaluated for grading activities to resume. The contaminated soil discovered shall be evaluated and excavated/disposed of, treated in-situ, or otherwise managed in accordance with all applicable regulatory requirements.

6. Level of Significance After Mitigation

With compliance with regulatory requirements, potential impacts associated with exposure to potentially hazardous materials would be less than significant. Nonetheless, the mitigation measure above has been proposed to ensure that specific regulatory requirements would be implemented.

IV. Environmental Impact Analysis

G. Hydrology/Water Quality

1. Introduction

This section describes existing hydrology and water quality in the area surrounding the Project Site and discusses the federal, state, and local regulations and standards that govern impacts to hydrology, water quality and drainage. Following a description of the existing conditions and regulations, potentially significant impacts associated with the proposed Project are identified, along with mitigation measures to reduce project impacts. Unless otherwise noted, the following section summarizes the findings and conclusions as presented in the *Proposed Hydrology & Preliminary Hydraulic Analysis for Forest Lawn Memorial Park* (Hydrology Analysis), prepared by Hunsaker and Associates, dated September 2010, and attached as Appendix G to this Draft EIR.

2. Environmental Setting

a. Regional Setting

(1) Los Angeles River Watershed

The Los Angeles River Watershed covers a land area of over 834 square miles, from the eastern portions of Santa Monica Mountains, and Simi Hills, and Santa Susana Mountains to the San Gabriel Mountains in the west. The watershed encompasses and is shaped by the path of the Los Angeles River, which flows from its headwaters in the mountains eastward to the northern corner of Griffith Park, where the channel turns southward through the Glendale Narrows before it flows across the coastal plain and into San Pedro Bay near Long Beach. The Los Angeles River Watershed has diverse patterns of land use. The upper portion of the watershed, approximately 360 square miles, is covered by forest or open space, while the remaining watershed, approximately 474 square miles, is highly developed with commercial, industrial, or residential uses. There are eight major tributaries to the Los Angeles River as it flows from its headwaters to the Pacific Ocean. The major tributaries of the Los Angeles River include Burbank Western Channel, Pacoima Wash, Tujunga Wash, and Verdugo Wash in the San Fernando Valley; and the Arroyo Seco, Compton Creek, and Rio Hondo south of the Glendale Narrows. The Project Site is located within the Glendale Narrows reach of the Los Angeles River Watershed.

The Los Angeles River, which once flowed freely over the coastal plain, was channelized between 1914 and 1970 to control the runoff and reduce the impacts of major flood events in the region. Today, the Los Angeles River is lined on 47.9 miles of its 51-mile course. The Los Angeles River, along much of its course, had intermittent flow during much of the year prior to channelization. In addition, many of its tributaries did not reach the river except during storm events. The current flow in the river is effluent dominated with approximately 80 percent of its flow originating at dischargers and the remaining flow coming from storm drain runoff and groundwater reaching the surface.

The Los Angeles River Watershed has impaired water quality in the middle and lower portions of the basin due to runoff from dense clusters of commercial, industrial, residential, and other urban activities. The 1998 303(d) list impairments in a majority of the watershed are due to point and non-point sources. These impairments include the following: pH, ammonia, a number of metals, coliform, trash, scum, algae, oil, chorpyrifos as well as other pesticides, and volatile organics.

b. Local Setting

(1) Hydrogeology of the Project Site

The Project Site is comprised of approximately 444 acres located south of Forest Lawn Drive and is bounded by Mount Sinai Memorial-Park to the north, Griffith Park to the east and south, and adjacent undeveloped property owned by Forest Lawn on the west. The Project Site is located within the Bull Canyon Hydrologic Subarea of the San Fernando Hydrologic Area in the Los Angeles-San Gabriel Hydrologic Unit of the Los Angeles Basin. The area around the Project Site drains toward the San Fernando Valley groundwater basin, providing recharge to this major source of groundwater. The clayey alluvium and Topanga Formation and the diorite bedrock beneath and near the Project Site are expected to exhibit relatively low hydraulic conductivity, so there are no expectations to transmit significant volumes of water.

The current depth to groundwater beneath the Project Site is unknown. Calculated groundwater elevations from historical data suggest a general groundwater flow direction to the north-northwest. While structural features in the bedrock may affect groundwater flow locally, the overall flow direction is expected to be as described, particularly since these structures also strike northwest.

(a) Existing Hydrologic Conditions

Due to the topographic characteristics of the Project Site and adjacent hillside areas to the south, the Project's hydrological drainage area encompasses approximately 930 acres. The Project's hydrological drainage Area is mostly undeveloped with steep

slopes, vegetated hillsides, and in some areas recently burned areas. The Project Site is located within Flood Zone X, as designated by the Federal Emergency Management Agency (FEMA), indicating the Project Site is outside the area subject to inundation by a flood having a 0.2 percent annual chance of flooding.

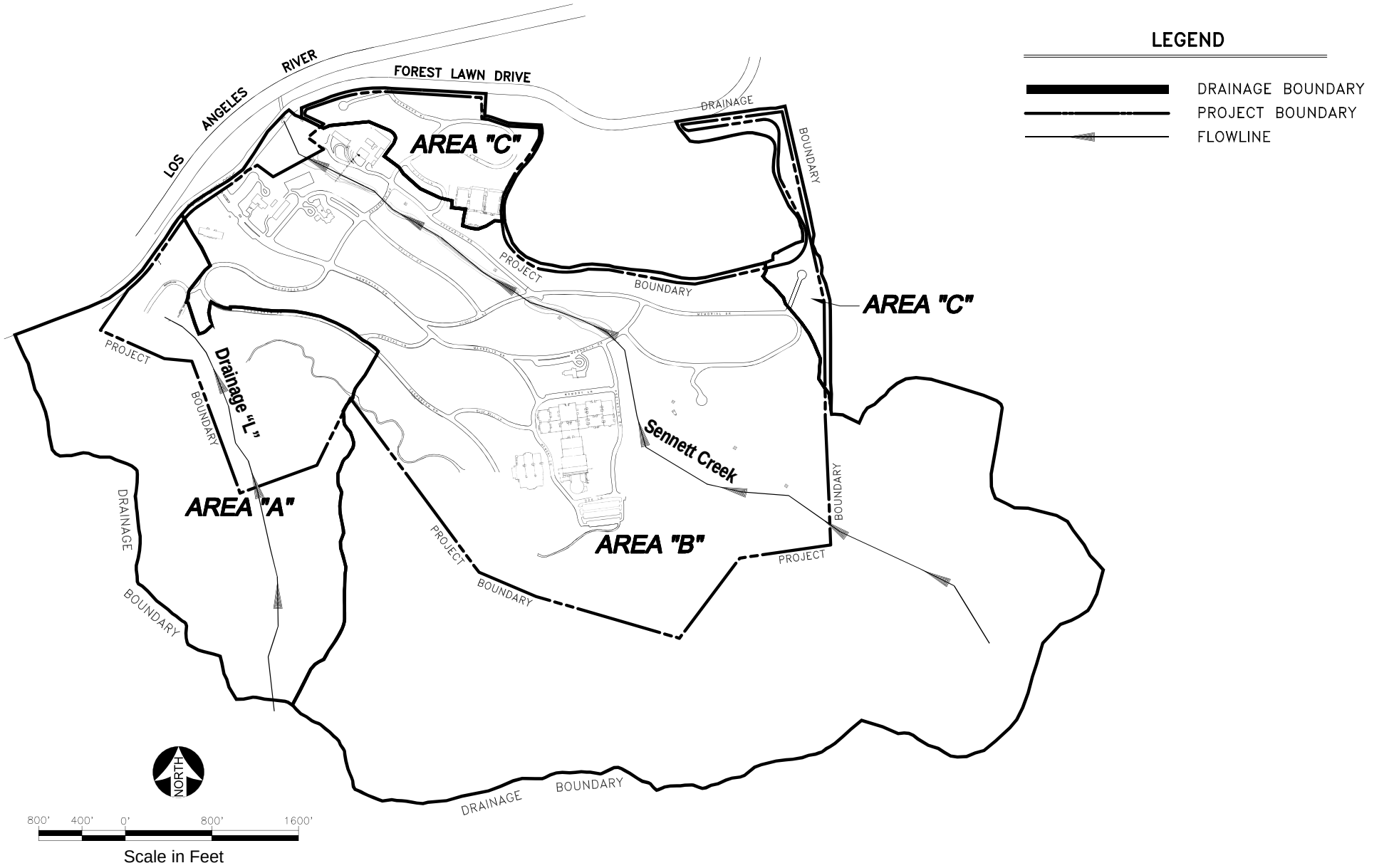
The Hydrologic Drainage Area for the Project Site is divided into three separate drainage areas, Drainage Areas "A" "B," and "C." Please refer to Figure IV.G-1, Project Hydrological Drainage Area, on page IV.G-4 for a visual depiction of these areas.

Drainage Area "A" occupies approximately 180 acres of the southwest portion of the Project Site, adjacent to the south side of Forest Lawn Drive. Within Drainage Area "A", all stormwater flows into an unnamed, northwest-trending natural drainage channel (defined as Drainage "L" in this Draft EIR section) that eventually drains into the Los Angeles River Flood Control Channel, located just north of the Project Site, through existing 48" reinforced concrete pipe (RCP) storm drains.

Drainage Area "B" occupies approximately 700 acres and includes a majority of the Project Site. Drainage Area B also includes stormwater flows from the several of the adjacent north facing slopes within Griffith Park. All stormwater in Drainage Area B flows into the on-site Sennett Creek, which runs northwesterly through the Project Site, and outlets into the Los Angeles River Flood Control Channel through three existing 60" corrugated metal pipes (CMP). Much of Sennett Creek, which originates in Griffith Park (Royce's Canyon) is located on the Project Site. Sennett Creek enters the Forest Lawn – Memorial Park property in the southern portion of the Project Site where stormwater flows from the north facing slopes of the Santa Monica Mountains converge into a more distinct channel and flow onto the Project Site. Sennett Creek ends at the northern portion of the Project Site, where it enters the three existing 60" CMPs, which flow north under Forest Lawn Drive into the Los Angeles River Flood Control Channel.

Area "C" occupies approximately 50 acres located east and west of Mount Sinai Memorial Park. Area "C" is within the Project Site, however beyond any proposed Project development. The drainage area is also made up of non-contiguous areas that drain directly off-site. Portions of Area "C" drain easterly via surface flow and through an existing storm drain system; other portions, located west of Mount Sinai drain north onto Forest Lawn Drive.

Hunsaker and Associates Inc. analyzed the current stormwater flows for the Project Site under a theoretical fifty-year capital flood event for the existing storm drain systems located within the Project Site. Each storm drain was analyzed to determine the capacity of the storm drains for proposed 50-year flows.



Source: Hunsaker & Associates, June 2009.

matrix environmental

Figure IV.G-1
Project Hydrological Drainage Area

(b) Basin 12 Interim Project

Fire and storm events in 2007 in the vicinity of the Project Site destabilized the slopes above Drainage L and generated large debris and mud flows. As an interim project, Forest Lawn completed emergency repair work to expand and combine three small existing debris basins to form a new larger debris basin (Basin No. 12) as an interim measure to increase the ability to control stormflows. Basin 12 is designed for a 50-year condition in conjunction with future improvements.

c. Regulatory Framework

(1) Federal

(a) Clean Water Act

The Clean Water Act (CWA) was first introduced in 1948 as the Water Pollution Control Act. Since its introduction, major amendments to the Clean Water Act have been enacted (e.g., 1961, 1966, 1970, 1972, 1977, and 1987). The 1972 amendments prohibit the discharge of pollutants into navigable waters of the United States from any point source, unless authorized by a National Pollution Discharge Elimination System (NPDES) permit. Amendments enacted in 1977 mandated development of a "Best Management Practices (BMPs)" Program at the state level. The 1987 amendments require the United States Environmental Protection Agency (EPA) to establish regulations for permitting of municipal and industrial stormwater discharges under the NPDES permit program. In addition, the CWA requires the states to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA.

(i) NPDES Program I

In response to the 1987 amendments to the Clean Water Act and as part of Phase I of its NPDES permit program, the USEPA began requiring NPDES permits for: (1) municipal separate storm sewer systems (MS4) generally serving, or located in, incorporated cities with 100,000 or more people (referred to as municipal permits); (2) 11 specific categories of industrial activity (including landfills); and (3) construction activity that disturbs five acres or more of land. Phase II of the USEPA's NPDES permit program, which went into effect in early 2003, extended the requirements for NPDES permits to: (1) numerous small municipal separate storm sewer systems,[1] (2) construction

[1] *A small municipal separate storm sewer system (MS4) is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers on a nationwide basis all small MS4s located in "urbanized areas" as defined by the Bureau of the Census (unless waived by the NPDES permitting authority), and on a case-by-case basis those small MS4s located outside of urbanized areas that the NPDES permitting authority designates.*

sites of one to five acres, and (3) industrial facilities owned or operated by small municipal separate storm sewer systems. The NPDES permit program is typically administered by individual authorized states. As further discussed below, in the State of California, the program is issued through the State Water Resources Control Board and the nine Regional Water Quality Control Boards.

(ii) Total Maximum Daily Load

The CWA requires the States to adopt water quality standards for receiving water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular receiving water body (e.g. wildlife habitat, agricultural supply, fishing etc.), along with water quality criteria necessary to support those uses. Water quality criteria are either prescribed concentrations or levels of constituents such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements which represent the quality of water that support a particular use.

When designated beneficial uses of a particular receiving water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as "impaired." Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (with a "factor of safety" included). Once established, the TMDL allocates the loads among current and future pollutant sources to the water body.

The CWA requires states to publish, every two years, an updated list of streams and lakes that are not meeting their designated uses because of excess pollutants (i.e., impaired water bodies). The list, known as the 303(d) list, is based on violations of water quality standards. Once a TMDL is developed and adopted into the Basin Plan, the water quality limited section is removed from the 303(d) list.

(2) State

(a) Porter-Cologne Water Quality Control Act

The federal CWA places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, establishing certain guidelines for the states to follow in developing these programs. It also allows the EPA to withdraw control from states if their implementation mechanisms are found to be inadequate. In California, the NPDES program is administered by the State Water Resources Control Board (SWRCB) through nine Regional Water Quality Control Boards (RWQCBs). The SWRCB and the RWQCBs were established in 1969 by the Porter-Cologne Water Quality Control Act, the principal law governing water quality regulation in California. The Porter-Cologne Act grants the SWRCB and the RWQCBs

authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act, which is embodied in the California Water Code, also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product. Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and by the SWRCB in its state water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste. The Project Site is located in Region 4, also known as the Los Angeles Region, and governed by the Los Angeles Regional Water Quality Control Board (LARWQCB).

(b) Construction General Permit

Pursuant to the CWA Section 402(p) (which requires regulations for permitting of certain stormwater discharges), the SWRCB has issued one statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit) to apply to all construction activities. Under the Construction General Permit (2009-0009-DWQ), effective July 1, 2010, stormwater discharges from construction sites with a disturbed area of one or more acres are required to be covered by the Construction General Permit. Coverage under the Construction General Permit is initiated by completing a Risk Assessment and submitting electronically a project's Permit Registration Documents (PRDs) through the SWRCB's Stormwater Multi-Application and Report tracking System. The PRDs include a Notice of Intent (NOI), a Risk Assessment, a Site Map, a Stormwater Pollution Prevention Plan (SWPPP), the annual fee, and the Signed Certification Statement.

Landowners are responsible for obtaining and complying with the permit, but may delegate specific duties to developers and contractors by mutual consent. For construction activities, the permit requires landowners or their designated agent to: (a) eliminate or reduce non-stormwater discharges to stormwater systems and other waters of the United States, (b) develop and implement the SWPPP prior to grading and during construction, and (c) perform inspections of stormwater control structures and pollution prevention measures. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. SWPPPs prepared in compliance with an NPDES Phase I Permit describe site erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls

where necessary. Compliance with the requirements of the Construction General Permit is used as one method to evaluate a proposed project's construction-related impacts on surface water quality. It is important to note that the General Permit clarifies that its runoff reduction requirements only apply to projects that lie outside of jurisdictions covered by a Standard Urban Stormwater Management Plan (SUSMP) (or other more protective) post-construction requirements in either Phase I or Phase II permits.

(c) California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the *Statement of Policy with Respect to Maintaining High Quality Water in California* was adopted by the State Water Board (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

(d) California Toxic Rule

In 2000, the EPA promulgated the California Toxic Rule, which establishes water quality criteria for certain toxic substances to be applied to waters in the State. EPA promulgated this rule based on the EPA's determination that the numeric criteria are necessary in the State to protect human health and the environment. The California Toxic Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health such as the Ballona Creek.

(3) Regional

(a) Board Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

As required by the California Water Code, the LARWQCB has adopted a plan entitled "Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties" (Basin Plan). Specifically, the Basin Plan designates beneficial uses for surface and groundwaters,[2] sets narrative and

[2] *Designated beneficial uses of water include but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Such uses may be past, present and probable future beneficial uses of water.*

numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's antidegradation policy, and describes implementation programs to protect all waters in the Los Angeles Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

The Basin Plan is a resource for the Regional Board and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

(b) Los Angeles County Permit

In 2001, the LARWQCB issued an NPDES permit and Waste Discharge Requirements under the CWA and the Porter-Cologne Act to the County of Los Angeles and the cities located therein (except Long Beach, which has its own permit) for urban runoff discharges in public storm drains in Los Angeles County. This permit specifically provides that:

> Federal, state, regional or local entities within the Permittee's boundaries or in jurisdictions outside the Los Angeles County Flood Control District, and not currently named in this Order, may operate storm drain facilities and/or discharge storm water to storm drains and watercourses covered by this Order.

The Permittees are the Los Angeles County cities and the County (collectively, the Co-Permittees). This permit requires that the municipalities adopt regulatory requirements governing a variety of developments within their jurisdictions and regulates stormwater discharges from MS4s in the Project Area. The Los Angeles County NPDES permit details requirements for new development and significant redevelopment, including specific sizing criteria for treatment Best Management Practices (BMPs) and flow control requirements. To implement the requirements of the Los Angeles County NPDES permit, the Co-Permittees have developed planning guidance and control measures that control and mitigate stormwater quality and quantity impacts to receiving waters as a result of new development and redevelopment. The Co-Permittees are also required to implement other municipal source detection and elimination programs, as well as maintenance measures.

(c) Stormwater Quality Management Program (SQMP)

The Los Angeles County NPDES Permit contains provisions for implementation of the Stormwater Quality Management Program (SQMP) by the Co-Permittees. The SQMP states that Permittees are required to implement the most effective combination of Best Management Practices for stormwater/urban runoff pollution control. The objective of the SQMP is to reduce pollutants in urban stormwater discharges to the Maximum Extent Practicable in order to attain Water Quality Objectives and to protect the beneficial uses of receiving waters in Los Angeles County.

(d) General Dewatering Permit

The LARWQCB has issued a General NPDES Permit and General Waste Discharge Requirements governing construction-related dewatering discharges (General Dewatering Permit). This permit addresses discharges from temporary dewatering operations associated with construction and permanent dewatering operations associated with development. The discharge requirements include provisions mandating notification, sampling and analysis, and reporting of dewatering and testing-related discharges. The General Dewatering Permit authorizes such construction-related activities so long as all conditions of the permit are fulfilled. Compliance with the requirements of the General Dewatering Permit is used as one method to evaluate a proposed project's construction-related impacts on surface water quality.

(4) Local

(a) City of Los Angeles Water Quality Compliance Master Plan for Urban Runoff

On March 2, 2007, City Council Motion 07-0663 was introduced by the City of Los Angeles City Council to develop a water quality master plan with strategic directions for planning, budgeting and funding to reduce pollution from urban runoff in the City of Los Angeles. The Water Quality Compliance Master Plan for Urban Runoff was developed by the Bureau of Sanitation, Watershed Protection Division in collaboration with the stakeholders to address the requirements of this Council Motion. The primary goal of the Water Quality Compliance Master Plan for Urban Runoff is to help meet water quality regulations. Implementation of the Water Quality Compliance Master Plan for Urban Runoff over the next 20 to 30 years will result in cleaner neighborhoods, rivers, lakes and bays, augmented local water supply, reduced flood risk, more open space, and beaches that are safe for swimming. The Water Quality Compliance Master Plan for Urban Runoff also supports the Mayor and Council's efforts to make Los Angeles the greenest major city in the nation.

The Water Quality Compliance Master Plan for Urban Runoff identifies and describes the various watersheds in the City, summarizes the water quality conditions of the City's waters, identifies known sources of pollutants, describes the governing regulations for water quality, describes the BMPs that are being implemented by the City, discusses existing TMDL Implementation Plans and Watershed Management Plans.

(b) City of Los Angeles Proposition O

On November 2, 2004, Los Angeles voters passed Proposition O with an overwhelming majority of 76 percent. The $500 million bond authorizes the City to fund projects that protect public health, capture stormwater for reuse and meet the Federal Clean Water Act through removal and prevention of pollutants entering regional waterways. A number of projects targeted at improving water quality have been authorized using Proposition O funds, including but not limited to: the Temescal Canyon Park Stormwater BMP, Los Angeles Zoo Parking Lot, the Westchester Stormwater BMP, Echo Park Lake Rehabilitation Project, and the Hansen Dam Recreational Area Parking Lot and Wetlands Restoration.

In addition, Proposition O funds were utilized for Catch Basin Screen Cover and Insert Project which provided for the installation of catch basin inserts and screen cover throughout the City beginning in 2005 with completion on September 30, 2007 (Phase I and Phase II). Phase III began in the spring of 2008 and will retrofit approximately 34,000 remaining catch basins with opening screen covers.

(c) City of Los Angeles Stormwater Program

The City of Los Angeles *Development Best Management Practices Handbook, Part A Construction Activities,* 3rd Edition, adopted by the City of Los Angeles Department of Public Works in September 2004, and associated ordinances reinforce the policies of the Construction General Permit. The handbook and ordinances also have specific minimum BMP requirements for all construction activities and require dischargers whose construction projects disturb one acre or more of soil to prepare a SWPPP and file a NOI with the Regional Water Quality Control Board.

Requirements of the Los Angeles County Municipal NPDES permit are mirrored within the City of Los Angeles's *Development Best Management Practices Handbook, Part B Planning Activities*, 3rd Edition, adopted by the City of Los Angeles Department of Public Works in June 2004. The manual provides guidance for developers in complying with the requirements of the Development Planning Program regulations of the City's Stormwater Program. Compliance with the requirements of this manual is required by City of Los Angeles Ordinance No. 173,494.

The requirement to incorporate stormwater BMPs into the SUSMP is implemented through the City's plan review and approval process. During the review process, project plans are reviewed for compliance with the City's General Plans, zoning ordinances, and other applicable local ordinances and codes, including storm water requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address storm water pollution prevention goals. The SUSMP provisions that are applicable to new residential and commercial developments include, but are not limited to, the following:[3]

- Peak Storm Water Runoff Discharge Rate: Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion;
- Provide storm drain system Stenciling and Signage (only applicable if a catch basin is built on-site);
- Properly design outdoor material storage areas to provide secondary containment to prevent spills;
- Properly design trash storage areas to prevent off-site transport of trash;
- Provide proof of ongoing BMP Maintenance of any structural BMPs installed; and
- Design Standards for Structural or Treatment Control BMPs: Post-construction treatment control BMPs are required to incorporate, at minimum, either a volumetric or flow based treatment control design or both, to mitigate (infiltrate, filter or treat) storm water runoff.

In addition, project applicants subject to the SUSMP requirements must select source control and, in most cases, treatment control BMPs from the list approved by the RWQCB. The BMPs must control peak flow discharge to provide stream channel and over bank flood protection, based on flow design criteria selected by the local agency. Further, the source and treatment control BMPs must be sufficiently designed and constructed to collectively treat, infiltrate, or filter stormwater runoff from one of the following:

- The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in *Urban Runoff*

[3] *City of Los Angeles Stormwater Program website: http://www.lastormwater.org/siteorg/businesses/susmp/housing.htm; accessed September 29, 2010.*

Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998);

- The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook—Industrial/ Commercial, (1993)*;

- The volume of runoff produced from a 0.75-inch storm event, prior to its discharge to a stormwater conveyance system; or

- The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" (0.75-inch average for the Los Angeles County area) that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

Per the City's *SUSMP Infiltration Requirements and Guidelines*, the order of preference specified below shall be followed in determining the appropriate type of SUSMP improvement for the project site.

1. Infiltration Systems (Design based on the volume of storm water)

2. Bio-Filtration/Retention Systems (Design based on flow of storm water)

3. Storm Water Capture and Re-Use (Optional. Subject to County Health Dept approval)

4. Mechanical/Hydrodynamic Units

5. Combination of Any of the Above

(d) Los Angeles Municipal Code

In addition, earthwork activities, including grading, are governed by the Los Angeles Building Code, which is contained in Los Angeles Municipal Code (LAMC), Chapter IX, Article 1. Specifically, Section 91.7013 includes regulations pertaining to erosion control and drainage devices and Section 91.7014 includes general construction requirements as well as requirements regarding flood and mudflow protection.

Section 64.70 of the LAMC sets forth the City's Stormwater and Urban Runoff Pollution Control Ordinance. The ordinance prohibits the discharge of the following into any storm drain system:

- Any liquids, solids, or gases which by reason of their nature or quantity are flammable, reactive, explosive, corrosive, or radioactive, or by interaction with other materials could result in fire, explosion or injury;

- Any solid or viscous materials which could cause obstruction to the flow or operation of the storm drain system;

- Any pollutant that injures or constitutes a hazard to human, animal, plant, or fish life, or creates a public nuisance;

- Any noxious or malodorous liquid, gas, or solid in sufficient quantity, either singly or by interaction with other materials, which creates a public nuisance, hazard to life, or inhibits authorized entry of any person into the storm drain system; and

- Any medical, infectious, toxic or hazardous material or waste.

Additionally, unless otherwise permitted by a NPDES permit, the ordinance prohibits industrial and commercial developments from discharging untreated wastewater or untreated runoff into the storm drain system. Furthermore, the ordinance prohibits trash or any other abandoned objects/materials from being deposited such that they could be carried into the storm drains. Lastly, the ordinance not only makes it a crime to discharge pollutants into the storm drain system and imposes stiff fines on violators, but also gives City public officers the authority to issue citations or arrest business owners or residents who deliberately and knowingly dump or discharge hazardous chemicals or debris into the storm drain system.

3. Environmental Impacts

a. Methodology

The analysis of surface water hydrology impacts is based, in part, on the Hydrology Analysis prepared by Hunsaker and Associates. This study is provided in Appendix G of this Draft EIR. The surface water hydrology analysis in the Hydrology Analysis includes a calculation of pre-Project and post-Project runoff flow rates and volumes during a 50-year storm event. The analysis assesses whether the existing stormdrain infrastructure system would be adequate to accommodate post-Project stormwater runoff.

The analysis of surface water quality impacts identifies the types of pollutants associated with construction and operation of the proposed Project and considers their effects on surface water quality. Consideration is given to Project Design Features that would minimize polluted stormwater runoff.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to hydrology. These questions are as follows:

Would the project:

- Violate any water quality standards or waste discharge requirements?
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- Otherwise substantially degrade water quality?
- Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or other flood hazard delineation maps?
- Place within a 100-year flood plain structures which would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Inundation by seiche, tsunami, or mudflow?

In the context of these questions from Appendix G of the CEQA Guidelines, the City of Los Angeles CEQA Thresholds Guide states that a project would normally have a significant impact on surface water hydrology and water quality if it would:

(1) Surface Water Hydrology

- Cause flooding during the projected 50-year developed storm event, which would have the potential to harm people or damage property or sensitive biological resources;
- Substantially reduce or increase the amount of surface water in a water body; or
- Result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow.

(2) Groundwater Hydrology

- Change potable water levels sufficiently to:
  - Reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or to respond to emergencies and drought;
  - Reduce yields of adjacent wells or well fields (public or private); or
  - Adversely change the rate or direction of flow of groundwater; or
- Result in demonstrable and sustained reduction of groundwater recharge capacity.

(3) Surface Water Quality

- Result in discharges that would create pollution, contamination or nuisance as defined in Section 13050 of the California Water Code or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body.

(4) Groundwater Quality

- Affect the rate or change the direction of movement of existing contaminants;
- Expand the area affected by contaminants;
- Result in an increased level of groundwater contamination (including that from direct percolation, injection or salt water intrusion); or
- Cause regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations (CCR), Title 22, Division 4, and Chapter 15 and in the Safe Drinking Water Act.

c. Project Impacts

(1) Project Design Features

In connection with the proposed Project approximately 147 acres would be graded within the southern, eastern and westernmost areas of the Project Site, as shown in Figure II-9, *Grading and Roadway Calculation Plan* in Section II, Project Description, of this Draft EIR. A majority of this area is currently covered with low vegetation. Of the affected acreage, approximately 94 acres would be developable and improved with interment areas. Overall, the Project includes approximately 22,500 square feet of new floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non–occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. In addition, approximately 16 acres would be improved with roadways and non-interment buildings. The remaining approximately 36 acres of graded areas would be improved as undevelopable slope and drainage/basin areas.

The proposed Project includes a number of specific Project Design Features (PDFs) that would be implemented to reduce or avoid water quality impacts and hydrologic impacts. These PDFs include site design, source control, and treatment control BMPs that would be incorporated into the proposed Project and are thereby considered a part of the proposed Project for purposes of impact analysis. Site design and source control BMPs help to manage the quantity and quality of both wet and dry weather runoff by limiting the frequency of occurrences and decreasing pollutant concentration. Treatment control BMPs are designed to remove pollutants once they have been mobilized by rainfall and runoff. The following is a brief discussion of the site design, source control, and treatment control PDFs for the proposed Project.

(a) Site Design, Source Control, and Treatment Control BMPs

(i) Vegetated BMPs

Vegetated BMPs are a type of BMP that utilizes the natural water quality improving characteristics of soils, plants, and microbes to improve the quality of stormwater flows. Vegetated BMPs provided by the proposed Project would include grassed swales, filter strips and bioretention areas. These types of BMPs are effective at removing many pollutants of concern, including sediment and pollutants associated with sediment, as well as some dissolved constituents, such as dissolved copper and zinc. Vegetated BMPs would be implemented at the adjacent hillsides along the boundaries of the Project Site's development areas.

(ii) Catch Basin Inserts

Catch basin inserts are stormwater screening and filtration devices that can be placed directly in conventional catch basins. Within Drainage Area A, the post development plan would include three debris basins for the lower, middle and upper reaches of Drainage L. Six debris basins are proposed within Drainage Area B: Basin J, Basin I, Basin H, Basin F, Basin D, and Basin B. The hydrologic capacity of the debris basins are discussed below under operational impacts. As discussed therein, all six proposed basins would exceed required design capacities for 50-year flow rates.

(iii) Volume-Based BMPs

Volume-based treatment control BMPs for the proposed Project, such as the six debris basins described above, would be sized to capture and treat annual runoff volumes from the tributary drainage areas. The size of the debris basins and storm drain facilities would be finalized during the design stage by the Project engineer with the final hydrology study, which would be approved by the City of Los Angeles prior to issuing the final grading permit(s). As discussed therein, all six proposed basins exceed required design capacities for 50-year flow rates.

(b) Pesticide Control

In order to maintain a safe and attractive environment, Forest Lawn makes an effort to keep its outdoor public open space and lawns free of destructive rodent infestations. Rodent damage can create safety hazards for visitors and employees, in addition to doing extensive damage to the cemetery grounds. Rodents of concern include pocket gophers, ground squirrels, and meadow mice. Fumigants and baits are used in a controlled manner as necessary for rodent control on the Project Site, and dead rodents are promptly removed. All of the control products used are registered by the State of California for the specific target pest and applied by a State licensed certified applicator. Trapping is used infrequently on-site.

The proposed Project would continue to include source control measures such as education programs for employees in the proper application, storage, and disposal of pesticides that would be used at the Project Site. The integrated pest management program described above would continue to be incorporated. The goal of an integrated pest management program is to keep pest levels at or below threshold levels, reducing risk and damage from pest presence, while eliminating the risk from the pest control methods used. Integrated pest management programs achieve these goals through the use of low risk management options by emphasizing use of natural biological methods and the appropriate use of selective pesticides. Integrated pest management programs also incorporate environmental considerations by implementing procedures that minimize intrusion and alteration of biodiversity in ecosystems.

(c) Trash and Debris

The proposed Project would include source controls such as street sweeping, public education, fines for littering, and storm drain stenciling catch basin inserts. These features are effective in reducing the amount of trash and debris that is available for mobilization during wet and dry weather events. Common area litter control would include a litter patrol, trash receptacles, and emptying of trash receptacles in a timely fashion.

(d) Dry Weather Runoff

In order to minimize the potential generation and transport of dissolved constituents, for landscape watering in interment and garden areas under the proposed Project would use efficient irrigation technology to minimize excess watering. The vegetated BMPs described above would infiltrate and/or provide treatment for dry weather flows and small storm events.

(2) Construction Impacts

The proposed Project would include grading of approximately 147 acres of land involving approximately 2.7 million cubic yards of soil. The grading and stockpiling plan is proposed to be divided into three grading areas and three phases, with separate areas of grading on the Project Site (Phase 1 (Central Area), Phase 2 (East Area) and Phase 3 (West Area)). Please refer to Figure II-8 (See Section II, Project Description, of this Draft EIR) for a visual depiction of these grading areas. All grading would take place in Drainage Areas A and B. No grading would occur in Drainage Area C.

In addition, buildout of the proposed Project would involve an additional 400,000 cubic yards of soil exported over the next 40 years as a result of grave site development. Construction activities that involve earthwork and grading have the potential to result in significant adverse water quality impacts. Three general sources of potential short-term construction-related stormwater pollution generally associated with construction projects include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) soil erosion and uncontrolled stormwater runoff.

Stormwater discharges during construction activities can compromise the biological, chemical, and physical integrity of a receiving water body. In this case of the Project Site, receiving bodies of water include the previously identified Drainage L, Sennett Creek and ultimately, the Los Angeles River Flood Control Channel, which is located just north of the Project Site. The interconnected process of erosion, sediment transport, and delivery is the primary pathway for introducing key pollutants, such as nutrients (particularly phosphorus), metals, and organic compounds into aquatic systems. The potential impacts of

construction activities, construction materials, and non-stormwater runoff on water quality focus primarily on sediment releases. Non-sediment related pollutants that are also of concern during construction include: construction waste materials; chemicals; liquid products; petroleum hydrocarbon products used in building construction or the maintenance of heavy equipment; and concrete-related waste streams. During construction, soil is generally exposed to natural processes such as precipitation (depending on the time of year) and stormwater runoff, which would be controlled on site and directed to the network of stormdrains and culverts discharging into Sennett Creek and the Los Angeles River Flood Control Channel.

(a) NPDES General Construction Permit

As discussed above, the proposed Project is subject to the NPDES General Construction Permit and would be required to complete a Risk Assessment and Permit Registration Documents. The Permit Registration Documents would include a Notice of Intent, a Risk Assessment, a Site Map, a SWPPP, an annual fee, and a Signed Certification Statement. The SWPPP would identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The would describe site erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls.

In addition, Project construction would occur in accordance with all City stormwater quality requirements. All grading and site preparation would comply with all applicable provisions of Chapter IX, Division 70 of the LAMC, which includes requirements such as the preparation of an erosion control plan to reduce the effects of sedimentation and erosion. Project construction would also comply with LAMC Section 64.70. Under LAMC Section 64.70, the discharge of pollutants into the stormwater system would be prohibited during construction. Further, Project construction would occur in accordance with the specific minimum construction BMP requirements as outlined in the City of Los Angeles *Development Best Management Practices Handbook, Part A Construction Activities,* 3rd Edition.

Therefore, adherence to Federal, State and regional regulations through the implementation of BMPs as part of the SWPPP and NPDES permitting process would ensure that construction impacts with respect to stormwater are less than significant. Nevertheless, mitigation measures are identified below to further reduce construction impacts to stormwater flows.

(b) General Dewatering Permit

Dewatering is not anticipated to be required in any of the grading areas. However, should dewatering be required, discharges from any temporary dewatering operations associated with construction activities would be covered under a NPDES General Dewatering Permit, which authorizes such construction-related activities so long as all conditions of the permit are fulfilled. Compliance with the requirements of the General Dewatering Permit is used as one method to evaluate a proposed project's construction-related impacts on surface water quality. As indicated above, prior to construction, the Applicant would be required to obtain a General Construction Permit from the LARWQCB. Based on the foregoing considerations, if any dewatering activities are planned to occur, compliance with the Waste Discharge Requirements in the dewatering general permit and final design of the dewatering system to minimize any off-site influence to groundwater, would ensure potential impacts associated with dewatering operations on groundwater quality are less than significant.

(3) Operational Impacts

(a) Hydrologic Volumes (Runoff)

The proposed Project's grading operations would not change the total area of Drainage Area A. As such, Drainage Area A, of which all stormwater flows into Drainage Line L, would continue to encompass approximately 180 acres. Following implementation of the proposed Project, Drainage Area A would produce a 50-year burned flow rate of approximately 336.5 cubic feet per second (cfs). The "burned flow rate" measures the stormwater flow rates of a drainage area that has experienced a fire event. Fire events tend to accelerate stormwater flows because they reduce the overall amount of vegetation in an area and destabilize soils. To accommodate this stormwater flow, three debris basins would be provided within this area. The debris basin volumes provided for the lower, middle, and upper reaches of Drainage L are 2.3 acre-feet, 2.0 acre-feet, and 5.7 acre-feet, respectively. The required basin volumes are 1.7 acre-feet, 1.7 acre-feet, and 4.6 acre-feet, respectively. The upper basin is designed to handle both debris and detention. Since the allowable peak discharge within this area is approximately 1.4 cfs per acre, the maximum flow rate allowed downstream into the Los Angeles River is approximately 252 cfs. Thus, approximately 84 cfs would be detained in the upper basin. The combined debris and detention basin is contingent upon City approval.

While the majority of stormwater flows in Drainage Area A would pass through one of the Project's proposed debris basins, a small portion of the stormwater flows would directly enter Drainage L. As such, these flows would still contain debris that would otherwise be removed by one the proposed debris basins. When stormwater flows contain debris, it increases the overall total volume of the stormwater flows. Stormwater flows

containing debris are known as "bulk flows". The total burned and bulked flow rate for Drainage Area A would be approximately 369 cfs.

Similar to Drainage Area A, the proposed Project's grading operations would not change the total area of Drainage Area B. As such, Drainage Area B would continue to encompass approximately 700 acres. Following implementation of the proposed Project, Drainage Area B would and produce a 50-year burned flow rate of approximately 1,086 cfs. As mentioned above, all stormwater in Drainage Area B flows into Sennett Creek. Riprap would be provided at outlet points within Drainage Area B where stormwater enters Sennett Creek to reduce the water velocities from the proposed outlets.[4] To accommodate stormwater flows in Drainage Area B, six debris basins are proposed (Basin J, Basin I, Basin H, Basin F, Basin D, and Basin B), which are located along the southern Project boundary to collect debris from the hillside south of the Project Site. The basin volumes required respectively are 0.8, 1.0, 5.5, 2.5, 3.9, and 0.3 acre-feet. The use of elevated inlets and/or de silting inlets may be allowed for this area and is contingent upon City approval.

As with Drainage Area A, a portion of the stormwater flows in Drainage Area B would not pass through one of the Project's proposed debris basins before entering Sennett Creek and would therefore still contain debris. The additional flows generated from the areas tributary to Sennett Creek (located towards the east) have been calculated as bulk flows, since no debris basins were provided for these areas. The 50-year bulked flow rate for Areas B is approximately 1,237 cfs.

The proposed Project would upgrade 17 storm drain systems (68 segments) within the Project Site. Storm drains would be sized with sufficient hydraulic capacity to accommodate the design hydrology and would be installed under private roadways within the Memorial Park for ease of maintenance. Further, as mentioned above, the proposed Project would also include the development of debris basins in Drainage Areas A and B to retain debris and reduce the overall total volume of stormwater flows. Pursuant to Mitigation Measure G-13 below, the new on-site storm drain system and debris basins would be maintained and operated by Forest Lawn Memorial-Park Association upon completion of construction.

These 17 storm drain systems were analyzed to determine if their capacity would be sufficient to accommodate the proposed Project's stormwater flows. Based on post-development hydrology calculations, the design runoff would be managed so as not to

[4] *Alteration of outlets to the Los Angeles River may require a Los Angeles County Flood Control permit.*

exceed the recommended and allowable runoff flows determined by the Los Angeles County Department of Public Works. Please refer to Appendix G, Hydrology Analysis, for detailed calculations of the proposed Project's calculated drainage capacities. Therefore, Project impacts related to surface water runoff and flooding would be less than significant.

(b) Surface Water Quality

In connection with the proposed Project approximately 147 acres would be graded within the southern, eastern and westernmost areas of the Project Site, as shown in Figure II-9, *Grading and Roadway Calculation Plan* in Section II, Project Description, of this Draft EIR. Paved and developed areas contribute substantially greater quantities of water to the storm drain system than pervious landscaped areas. The proposed Project would convert approximately 94 acres of currently undeveloped area to developed area with interment area and would include approximately 16 acres of new roadway and non-interment building area. The remaining approximately 36 acres of graded areas would be improved as undevelopable slope and drainage/basin areas. As such, the Project has the potential to adversely affect the quality of stormwater runoff. The quality of stormwater is generally affected by the length of time since the last rainfall, rainfall intensity, land use in the area, and quantity of transported sediment. Street and parking lot surfaces are the primary source of stormwater pollution in urban areas. Stormwater runoff from parking lots has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system. As such, new developments are required to be designed so as to reduce water pollution to the Maximum Extent Practicable. The various operational control PDFs discussed above would reduce the volume of dry weather runoff, and treatment control PDFs would capture and treat the dry weather runoff that may occur. Implementation of these PDFs including Site Design, Source Control, and Treatment Control Best Management Practices would ensure that potential impacts to surface water quality would be less than significant.

4. Cumulative Impacts

For purposes of assessing the proposed Project's impacts to flooding, the geographic limits of the area of potential affect are defined within the 930-acre Hydrologic Drainage Area as defined above. As mentioned above, the Project's Hydrologic Drainage Area is mostly undeveloped with steep slopes, vegetated hillsides, and in some areas recently burned areas. The volume of surface water runoff from the area is affected by existing vegetation, on-site developed drainages and BMPs. Future development within the Project's affected Hydrologic Drainage Area is not anticipated beyond that associated with the proposed Project as the adjacent areas outside the Project Site to the south and east are designated as natural parkland within Griffith Park. Based on preliminary post-development hydrology calculations, the design runoff within the hydrologic drainage area would be managed to not exceed the recommended and allowable runoff flows determined

by the Los Angeles County Department of Public Works. Therefore, the Project's cumulative impacts related to surface water runoff and flooding would be less than significant.

For purposes of assessing the proposed Project's impacts to surface water quality, the geographic limits of the area of potential affect include the receiving waters of on-site tributaries, Sennett Creek and the Los Angeles River Flood Control Channel. As discussed previously, the anticipated quality of effluent expected from the Project Site would not contribute loads or concentrations of pollutants of concern that would be expected to cause or contribute to a violation of the water quality standards in the Project's receiving waters. In addition, the Project's compliance with the Standard Urban Stormwater Mitigation Program requirements and implementation of the BMP measures discussed above would ensure the project is in compliance with the TMDL requirements for the Los Angeles River Channel watershed. Therefore, with compliance with all applicable laws, rules and regulations, no significant cumulative impacts to surface water quality are anticipated.

5. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts to stormwater runoff during both construction and operation. Nonetheless, the following measures are recommended to further reduce any potential impacts:

a. Construction

Mitigation Measure G-1 All waste shall be disposed of properly. Non recyclable materials/wastes shall be taken to an appropriate landfill. Toxic wastes shall be properly characterized and disposed at a licensed regulated disposal site.

Mitigation Measure G-2 Leaks, drips and spills shall be cleaned immediately to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.

Mitigation Measure G-3 Hosing down of pavement at material spills shall be prohibited. Dry cleanup methods shall be used whenever possible.

Mitigation Measure G-4 Dumpsters shall be covered and maintained. Uncovered dumpsters shall be placed under a roof or covered with tarps or plastic sheeting.

Mitigation Measure G-5 Gravel approaches shall be used where truck traffic is frequent to reduce soil compaction and limit the tracking of sediment into streets.

Mitigation Measure G-6 All vehicle/equipment maintenance, repair, and washing shall be conducted away from storm drains. All major repairs shall

be conducted off-site. Drip pans or drop clothes shall be used to catch drips and spills.

b. Operation

Mitigation Measure G-7 The proposed Project shall implement stormwater BMPs to retain or treat the runoff from a storm event. The design of structural best-management practices (BMPs) in all new construction areas shall be to the satisfaction of the City.

Mitigation Measure G-8 The proposed Project shall be designed such that post development peak stormwater runoff discharge rates shall not exceed the estimated pre-development rate. A signed certificate from a California licensed civil engineer to confirm that the proposed Project is designed in such a manner shall be required.

Mitigation Measure G-9 Appropriate erosion control and drainage devices such as interceptor terraces, berms, vee-channels, and inlet and outlet structures shall be incorporated in all new construction areas. Outlets of culverts, conduits or channels shall be protected from erosion by discharge velocities by installing rock outlet protection. (Rock outlet protection is a physical device composed of rock, grouted riprap, or concrete rubble placed at the outlet of a pipe.)

Mitigation Measure G-10 Potentially hazardous materials with the potential to contaminate stormwater shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

Mitigation Measure G-11 Storage areas for hazardous materials shall be paved and sufficiently impervious to contain leaks and spills.

Mitigation Measure G-12 Storage areas for hazardous materials shall have a roof or awning to minimize collection of stormwater within the secondary containment area.

Mitigation Measure G-13 The Project Applicant shall maintain and operate the new on-site storm drain system and debris basins.

6. Level of Significance After Mitigation

As discussed above, the proposed Project would not violate any water quality standards or waste discharge requirements, and would not otherwise substantially degrade water quality. Implementation of the above identified PDF's would ensure that the proposed Project is designed and developed in a manner that ensures water quality standards are met. The above proposed mitigation measures would further reduce these less than significant impacts.

The proposed Project's impacts to hydrology and water quality, including waste discharge requirements, groundwater supplies, groundwater recharge, drainage patterns, flood hazard and flood water flows, and stormwater drainage systems, would therefore be less than significant.

IV. Environmental Impact Analysis

H. Land Use Planning

1. Introduction

This section of the Draft EIR analyzes the proposed Project's potential impacts with regard to land use. Specifically, this section analyzes the proposed Project's consistency with relevant land use plans, policies, and regulations and evaluates the relationship of the proposed Project with surrounding land uses.

2. Environmental Setting

a. Background and Existing Land Uses

The approximately 444-acre Project Site is located in the Hollywood community of the City of Los Angeles. The Project Site is located south of Forest Lawn Drive and the SR-134 Freeway.

The majority of the Project Site, which is zoned A1-1XL-H (agricultural zone) and RE 40-1 (residential estate) in the City of Los Angeles Planning and Zoning Code, is presently developed with cemetery-related uses including a mortuary and flower shop, interment sites, wall crypts/columbaria, cremation garden columbaria, churches (i.e., the Church of the Hills and the Old North Church), and facilities which are used to host special events and programs throughout the year, including the Hall of Liberty/Museum, and the Plaza of Mesoamerican Heritage. Various operations and maintenance-related buildings are also located on the Project Site, including an administration building, storage buildings and garages, maintenance yard buildings, water storage tanks, and two pump houses. A 150-foot wide transmission easement (granted to the Los Angeles Department of Water and Power) runs diagonally northwest to southeast across the middle of the Project Site between Forest Lawn Drive on the north and the Santa Monica Mountains on the south. The Project Site is bisected by Sennett Creek, an intermittent USGS-designated blueline stream with 17 tributaries within the Project Site. Other ephemeral streams and basins located on the Project Site include the unnamed Drainage L and its eight tributaries, as well as ten on-site basins. These drainages ultimately direct surface water runoff flow from the Project Site and several off-site tributaries into the Los Angeles River Flood Control Channel. This issue is further discussed in Section IV.C, Biological Resources, of this Draft EIR. As can be seen on Figure II-2, *Aerial Photograph,* in Section II, Project Description of

this Draft EIR, paved roadways, landscaped areas, and graded undeveloped pads are also present on the Project Site. The remainder of the Project Site is undeveloped.

A granite quarry was previously located on a 45-acre portion of the Project Site along its western boundary through the mid 1980's. Following that use, a supplemental use surface mining district (appearing as "-G" on the zone designation) was approved at the same location for the mining of decomposed granite. Mining operations continued until September of 1994. Subsequently, a reclamation plan was approved and implemented for the surface mining district site consistent with the requirements of the City of Los Angeles, and as required by state law. Currently, the Project Site is in compliance with the provisions of the approved reclamation plan for this site. For a discussion of soils and geology issues related to this prior use on the Project Site, see Section IV.E, Geologic Resources, of this Draft EIR.

(1) Existing Conditional Use and Discretionary Approvals

The Forest Lawn Memorial-Park—Hollywood Hills property is governed by prior entitlements that have been granted by the City. The majority of the Project Site, approximately 410 acres, is permitted as a cemetery pursuant to a Conditional Use Permit (CUP) issued by the City in 1948 and approximately 30 acres are permitted for cemetery use pursuant to subsequent CUPs.[1] As such, Forest Lawn has operated a cemetery use at this location for approximately 60 years.

(2) Surrounding Land Uses

Figure II-2, *Aerial Photograph*, in Section II., Project Description of this Draft EIR, identifies the existing land uses surrounding the Project Site. As shown in this figure, the Project Site is immediately bounded by Forest Lawn Drive on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn to the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California, Inc. to the north and northeast. North of Forest Lawn Drive is the DWP Headworks Spreading Grounds Site, as well as the Los Angeles River Flood Control Channel and the SR 134 Freeway. Surrounding land uses beyond the SR 134 Freeway to the north include the Disney Studios, the ABC studio office buildings, the Warner Brothers Studios lot, Providence High School, a hospital, parks and single-family residential uses, which are located within the City of Burbank. North of the western portion of the Project

[1] *Approximately 4.5 acres of the project site are not currently permitted by CUP for cemetery use.*

Site, single-family residential homes and the easternmost portion of the Warner Brothers Studio lot lie between the Los Angeles River Flood Control Channel and the SR 134 Freeway. The Project Site is buffered from both residential uses and studio office uses located to the north, and many of the property's uses are not visible from off-site locations due to the topography of the immediate area. The existing zoning on the proposed Project Site and surrounding properties is shown in Figure IV.H-1 on page IV.H-4, Zoning Designations.

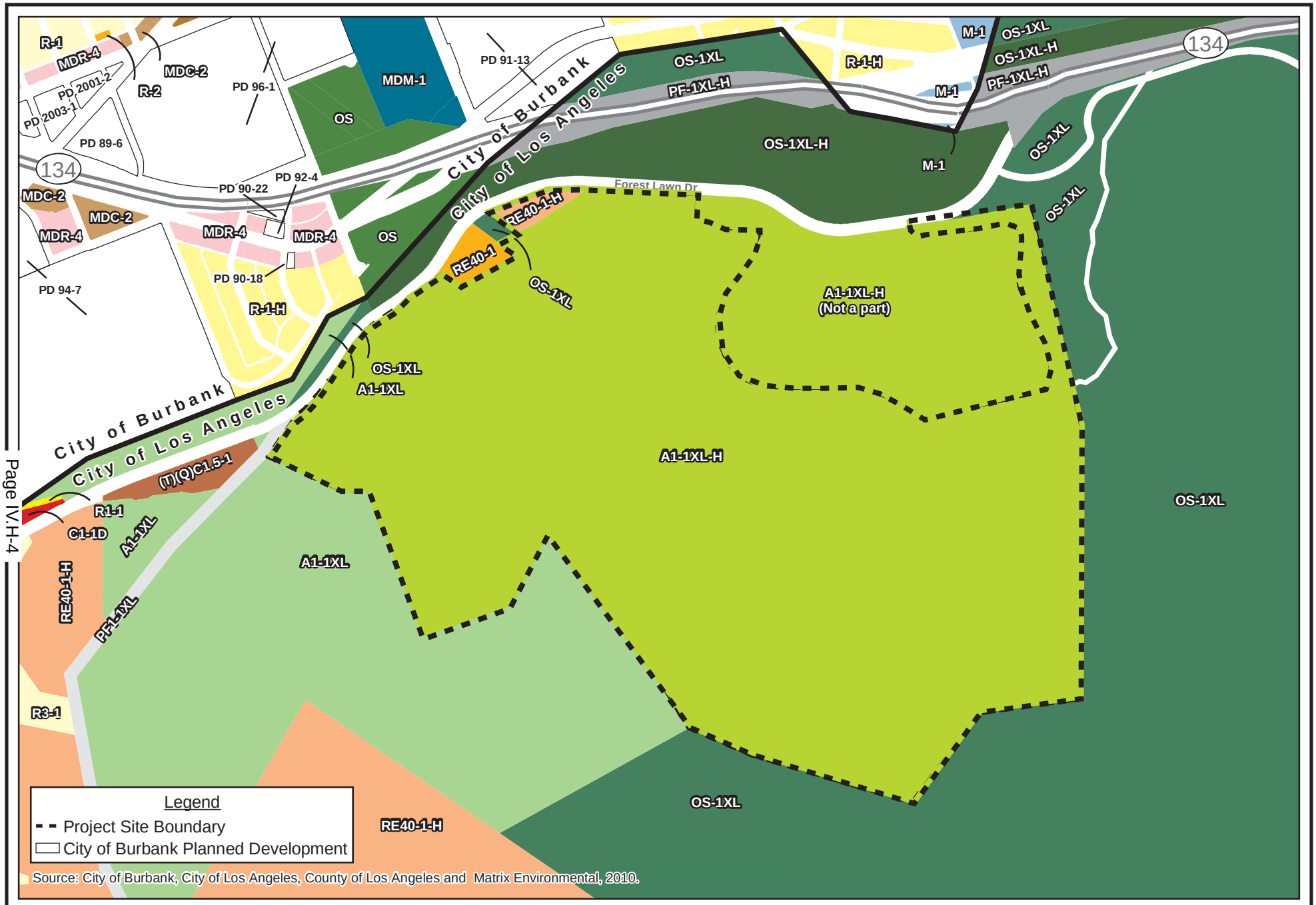
b. Regulatory Setting

At the local level, the Project Site is located within the City of Los Angeles. As such, development of the Project Site is guided by the General Plan of the City of Los Angeles, which provides general guidance on land use issues and planning policy for the entire City. More specifically, the Project Site is located within the Hollywood Community Plan area. In addition, it also falls within the boundary of the Los Angeles River Revitalization Master Plan. Land use development on the Project Site is also governed by the City of Los Angeles Planning and Zoning Code, which is intended to guide land use decisions and development patterns for individual properties.

The Project Site is also located within the jurisdiction of, and is therefore subject to, the adopted plans and regulations of state, regional, and local agencies. At the regional level, the Project Site is located within the planning area of the Southern California Association of Governments, the region's federally-designated metropolitan planning organization, and therefore is subject to various plans prepared by that agency. These plans include the Southern California Association of Governments' (SCAG) 2008 Regional Comprehensive Plan, SCAG 2004 Compass Blueprint Growth Vision, and the SCAG 2008 Regional Transportation Plan. The Project Site is located within the South Coast Air Basin and therefore is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As such, the proposed Project is subject to the SCAQMD's Air Quality Management Plan (AQMP). In addition, the Project Site is subject to the Congestion Management Plan (CMP) for Los Angeles County.

(1) City of Los Angeles General Plan

The City of Los Angeles General Plan is a comprehensive, long range declaration of purposes, policies and programs for development within the City of Los Angeles. The General Plan is a dynamic document consisting of eleven elements, which include ten Citywide elements (Air Quality Element, Conservation Element, Historic Preservation and Cultural Resources Element, Housing Element, Infrastructure Systems Element, Noise Element, Open Space Element, Public Facilities and Services Element, Safety Element, and Transportation Element) and the Land Use Element, which is comprised of individual plans for each of the City's 35 Community Plan areas. Those elements that would be most



matrix environmental

NORTH

0 750 1,500 2,250 3,000
Feet

Figure IV.H-1
Zoning Designations

applicable to the proposed Project are the Land Use Element (discussed further below as the Hollywood Community Plan), the Conservation Element, the Open Space Element, and the Transportation Element.

(a) City of Los Angeles General Plan Framework

The City of Los Angeles General Plan Framework (Framework), adopted in December 1996 and updated in August 2001, provides current general guidance on land use issues for the entire City. The Framework is a long range, Citywide, comprehensive growth strategy. Because it looks at the City as a whole, the Framework provides a Citywide context within which local planning takes place. The Framework sets forth a conceptual relationship between land use and transportation on a Citywide basis and defines new land use categories which better describe the character and function of the City as it has evolved over time. The Project Site is not within any of the new land use categories established in the Framework. Therefore, all land use conformity analyses are based on the community plan level policies and objectives.

(b) Land Use Element - Hollywood Community Plan

As mentioned above, the Land Use Element of the General Plan is divided into 35 Community Plans. Each Community Plan is intended to implement the policies of the General Plan Framework at the community level. The Community Plans are intended to promote an arrangement of land uses, streets and services which will encourage and contribute to the economic, social and physical health, safety, welfare and convenience of the people who live and work in the community.

The Project Site is within the boundaries of the Hollywood Community Plan. The Hollywood Community Plan contains broad objectives and specific policies for land use and development which address commerce, housing, industry, circulation and service systems (recreation and parks, fire protection, public schools, library, other public facilities, and social services). It also includes a public improvement program for circulation features and facilities; recreation, parks and open space areas; and development of other public facilities.

The Community Plan was adopted on December 13, 1988. The Hollywood Community Plan is currently in the process of being updated by the Department of City Planning. A draft of the revised Hollywood Community Plan was released for public review on June 29, 2009. As of this date, the Community Plan remains in draft form (i.e., it has not been adopted by the City Council). Consequently, the type, density, and design of development permitted on the Project Site is subject to the provisions of the adopted Hollywood Community Plan. As shown in Figure IV.H-2 on page IV.H-6, the most recent version of the Hollywood Community Plan, which was adopted in December 1988, designates the Project Site, as well as the immediately surrounding properties, for “Open Space.”



Source: City of Burbank, City of Los Angeles, County of Los Angeles and Matrix Environmental, 2010.

matrix environmental

NORTH

0 750 1,500 2,250 3,000

Feet

Figure IV.H-2
Land Use Planning Designations

(c) Conservation Element

The Conservation Element of the City of Los Angeles General Plan is an informational document designed to further the understanding of the context, history and opportunities for protection and improvement of the City's natural resources. It surveys laws, requirements and procedures which have been established for protection of natural resources.

Its scope includes conservation, development, and utilization of natural resources, including water and hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The Conservation Element also addresses water and land reclamation, water (including ocean) pollution, regulation and use of land in stream beds, erosion, watershed protection, flood control and rock, sand and gravel resources.

(d) Open Space Element

The Open Space Element of the City of Los Angeles General Plan, adopted June 1973, provides for the identification, preservation, conservation and acquisition of open space in the City. It includes definitions, objectives, policies, standards and criteria, programs and a map for use when decisions are made pertaining to open space within the City of Los Angeles. The Open Space Element identifies the Project Site as "Privately Owned Land – Cemetery", with the immediately surrounding properties to the east and south designated as "Publicly Owned Land – Griffith Park" (an identified Regional Park).

(e) Transportation Element

The Transportation Element of the City of Los Angeles General Plan is designed to facilitate long-term mobility and accessibility within the City of Los Angeles. The Project Site is bounded by Forest Lawn Drive to the north, which is designated as a Major Class II Highway in the Transportation Element. Additionally, the Transportation Element designates the 2.2 mile stretch of Forest Lawn Drive between Barham Boulevard and Griffith Park Drive as a scenic highway within the City of Los Angeles. This same roadway segment is also designated as a Class II Bikeway (bike lane) in the City of Los Angeles Bicycle Plan, a component of the Transportation Element. A discussion of the potential traffic and circulation impacts associated with the proposed Project is presented in Section IV.J, Traffic, Circulation, and Parking, of this Draft EIR.

(f) Safety Element

The Safety Element replaced three previously adopted elements of the General Plan: the 1975 Safety Element, the 1974 Seismic Safety Element, and the 1979 Fire Protection & Prevention Element. The Safety Element provides a contextual framework for

understanding the relationship between hazard mitigation, response to a natural disaster, and initial recovery from a natural disaster. The Safety Element contains goals, objectives, policies and programs for hazard mitigation, emergency response, and disaster recovery that are broadly stated to reflect the comprehensive scope of the Emergency Operations Organization, the only entity that implements the Safety Element. As City codes and regulations contain standards applicable to development projects, the Safety Element programs (implemented by Emergency Operations Organization) generally do not contain specific development standards.

The Project Site is not located within or immediately adjacent to the Alquist-Priolo Special Study Zone. However, the Project Site is located within a designated Fault Rupture Study Zone, as well as within a wildfire hazard area and a designated hillside area. In addition, the Project Site contains one identified critical facility and lifeline system (i.e., high voltage transmission lines within the LADWP easement). Furthermore, a small area at the northernmost portion of the Project Site is located within an area designated as susceptible to liquefaction and/or inundation. A discussion of potential geologic impacts associated with the proposed Project is presented in Section IV.E, Geologic Resources, of this Draft EIR. A discussion of potential wildland fire hazards and flood hazard impacts associated with the proposed Project are presented in Section IV.L, Public Services, and Section IV.G, Water Resources, respectively.

(g) Noise Element

The Noise Element identifies goals to manage noise within the City and to protect sensitive uses from excessive noise-related impacts. The primary goal of the Noise Element is a city where noise does not reduce the quality of urban life. The Noise Element also contains objectives, policies, and programs which address noise management and is implemented by a variety of City regulations and standards. A complete analysis of the noise impacts of the proposed Project is contained in Section IV.I, Noise, of this Draft EIR.

(2) Los Angeles River Revitalization Master Plan

The Los Angeles River Revitalization Master Plan was adopted by the City Council on May 9, 2007. The Los Angeles River Revitalization Master Plan is intended to serve as a blueprint for implementing a variety of greening projects, including the development of parks and open space, pedestrian and bicycle trails, bridges, enhanced connector streets, channel modifications, revitalized riverfront communities in key opportunity areas, and a proposed River Improvement Overlay (RIO) District along the 32-mile stretch of the River within the City of Los Angeles.

The Los Angeles River Revitalization Master Plan provides the overall vision for revitalization of the Los Angeles River, focusing on the River and its surrounding

communities, with a focus on the creation of parks, paths, and open spaces. The Plan intends to revitalize the general environment of the Los Angeles River over the near-term planning period (5 to 20 years) and the long-term planning period (20 to 50 years) by providing improved natural habitat, economic values, water quality, recreation, and open space amenities. The Los Angeles River Revitalization Master Plan purposes include the provision of improved public access to the River and the encouragement of reinvestment in the surrounding urban system that would result in economic growth. The Los Angeles River Revitalization Master Plan is a visionary document intended to provide communities with an idea of what future choices may entail regarding changes in and near the Los Angeles River. It is not intended to dictate how this transformation will occur. This responsibility is delegated to the Community Plan jurisdictions and will take effect in part, with the establishment of the RIO District. The proposed RIO District does not include the Project Site.

(3) City of Los Angeles Municipal Code

(a) Allowable Uses

The Project Site is zoned A1-1XL-H (agricultural zone), and RE40-1 (residential estate), as set forth in the Los Angeles Municipal Code (LAMC) (see Figure IV.H-1 on page IV.H-4). Uses permitted in the agricultural zone include one-family dwellings, parks, playgrounds, community centers, golf courses, extensive agricultural uses, and home occupations. Uses permitted in the residential estate zone include all those permitted in the agricultural zone except golf courses and extensive agricultural uses, but also permit accessory living quarters. The portion of the Project Site within the RE40 zone is located within Height District 1, which allows no building or structure to exceed forty-five feet in height. The portion of the Project Site within the A1 zone is located within Height District 1XL (Extra Limited Height District), which requires that no building or structure exceed two stories or thirty feet in height. The “H” in the zoning designation requires development to be in conformance with the hillside regulations contained in Section 12.21-A.17 of the City of Los Angeles Planning and Zoning Code. The provisions of this ordinance pertain to residential projects located in hillside areas. Because the proposed Project does not include any residential use, the provisions of this ordinance would not apply to the proposed Project.

In the year 2000, the LAMC was revised to identify cemeteries as a public benefit use permitted in any zone or location, unless otherwise restricted, so long as specific performance standards or approved alternative compliance measures are met. Specific performance standards are specified for cemetery uses to ensure that their landscaping, open space, scale, bulk, height, yards and setbacks (particularly with regard to the main building) are similar to those in the adjacent properties in the neighborhood. These performance standards are as follows:

1. All buildings on the site are at least 300 feet from any adjoining street or any A or R zoned property or residential use;

2. Security night lighting is shielded so that the light source cannot be seen from adjacent residential properties;

3. There is a solid, decorative, masonry or wrought iron wall or fence at least eight feet in height, or the maximum height permittee by the zone, whichever is less. The wall or fence encircles the periphery of the property and does not extend into the required front yard setback;

4. The front yard setback is as least as deep as the setback required by the zone;

5. The property is improved with a ten foot landscaped buffer along the periphery of the property which is maintained and is equipped with an automatic irrigation system;

6. The site has only one double-faced monument sign, with a maximum of 20 square feet per side;

7. All graffiti on the site is removed or painted over in the same color as the surface to which it is applied within 24 hours of its occurrence;

8. All streets, alleys or sidewalks adjoining the property meet standard street dimensions;

9. The use meets the parking requirements of Section 12.21 A; and

10. The property has sufficient areas for assembly.

Alternative compliance measures to those performance standards listed above may also be applied for pursuant to the procedures outlined in subsection B of Section 14.00.

(4) City of Los Angeles Protected Tree Ordinance

Forest Lawn has been operating a memorial park at the Project Site since 1948. In 1980, the City adopted the Oak Tree ordinance, which included certain exemptions from the new oak tree removal and relocation permit requirements for certain previously approved projects. Forest Lawn applied for verification from the City that this exemption applied to the Forest Lawn Memorial Park – Hollywood Hills property. As a result of this request, the City and Forest Lawn entered into a Stipulated Judgment (filed with the Superior Court) in 1998 to govern the removal or relocation of oak trees from the Forest Lawn Memorial Park – Hollywood Hills property. Pursuant to the 1998 Stipulated Judgment, Forest Lawn is permitted to remove or relocate oak trees from the Forest Lawn

Memorial Park – Hollywood Hills property. Forest Lawn is required to replace any oak tree removed from the Hollywood Hills property with an oak tree sapling (propagated, to the extent possible, from acorns collected from coast live oak specimens located on the Hollywood Hills property). The oak tree saplings may be planted within the Forest Lawn Memorial Park – Hollywood Hills property or installed on City property around and including Griffith Park.

Pursuant to Ordinance 177404, effective April 23, 2006, the City of Los Angeles' Oak Tree Ordinance was amended to become the "Protected Tree Ordinance." Species protected under the provisions of the Protected Tree Ordinance include Oak trees, including Valley Oak and California Live Oak, or any other tree of the oak genus indigenous to California (but excluding the Scrub Oak), Southern California Black Walnut, Western Sycamore, and California Bay. The Protected Tree Ordinance prohibits removal or relocation of these trees without first obtaining a permit from the Board of Public Works. The application for a permit must indicate the location of each tree proposed to be retained, relocated, or removed. In addition, a minimum of two oak trees (a minimum of 15 gallons in size) must be planted for each one that is removed. Furthermore, a bond must be posted to guarantee the survival of trees which would be maintained, replaced or relocated to ensure the existence of continuously living trees for a minimum of three years from the date the bond was posted, or the trees were replaced or relocated. Potential impacts to protected tree species from implementation of the proposed Project are identified and discussed in Section IV.C, Biological Resources, of this Draft EIR.

(5) Southern California Association of Governments

(a) 2008 Regional Comprehensive Plan

The 2008 Regional Comprehensive Plan (RCP) was published in October of 2008 and serves as an advisory document for (voluntary) use by local governments in the SCAG region as an informational resource, and as a reference document for their use in developing plans and addressing local issues of regional significance. The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The plan incorporates principles and goals of the Compass Blueprint Growth Vision and includes nine chapters addressing land use and housing, transportation, air quality, energy, open space, water, solid waste, economy, and security and emergency preparedness. The action plans contained therein provide a series of recommended near-term policies that developers and key stakeholders should consider for implementation, as well as potential policies for consideration by local jurisdictions and agencies when conducting project review.

As an advisory document, it is not used by SCAG to review regionally significant projects. Although the RCP recommends integrated resource planning, it does not mandate anything. Regulative action is deferred to local governments during General Plan updates, municipal code amendments, design guidelines, incentive programs, and other actions.

The Land Use and Housing section of the RCP contains goals which pertain to land use and transportation planning that address implementation of Compass Blueprint Growth Vision and the 2% Growth Strategy (discussed further below). Relevant goals which would pertain to the proposed Project include the following:

- Focus growth in existing and emerging centers and along major transportation corridors;
- Preserve existing, stable, single-family neighborhoods; and
- Protect important open space, environmentally sensitive areas and agricultural lands from development.

The 2008 RCP replaced SCAG's 1996 Regional Comprehensive Plan and Guide (RCPG) for use in SCAG's Intergovernmental Review (IGR) process. However, as indicated above, because of its advisory nature, the RCP is not used in SCAG's IGR process. Rather, SCAG reviews new projects based on consistency with the 2008 Regional Transportation Plan (RTP) and Compass Growth Vision.[2]

(b) Compass Blueprint Growth Vision

The SCAG Compass Blueprint Growth Vision, adopted in 2004, provides the SCAG jurisdiction with a roadmap for growth. It is a response, supported by a regional consensus, to land use and transportation challenges facing Southern California now and in the coming years. The underlying goal of the growth visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income. To organize the strategies for improving the quality of life in the SCAG region, four key principles were established by the Growth Vision Subcommittee. The four key principles are:

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[2] *Prior to publication of the 2008 RTP, projects considered to be regionally significant based on SCAG criteria were required to provide an analysis of consistency with the 1996 RCPG goals and policies.*

1. Mobility – Getting where we want to go;

2. Livability – Creating positive communities;

3. Prosperity – Long-term health for the region; and

4. Sustainability – Preserving natural surroundings.

Additionally, the Compass Blueprint Growth Vision incorporates a 2% Growth Strategy that provides a guideline for how to implement the Growth Vision. This strategy focuses on increasing the region's mobility, enhancing the livability of our communities, enabling prosperity, and promoting sustainability. The specific components of the Compass Blueprint Growth Vision that are relevant and applicable to the proposed Project are listed under the Livability and Sustainability Principles and include the following:

- Support the preservation of stable, single-family neighborhoods;
- Preserve rural, agricultural, recreational and environmentally sensitive areas;
- Focus development in urban centers and existing cities;
- Develop strategies to accommodate growth that use resources efficiently, and minimize pollution and waste; and
- Use "green" development techniques.

Impacts from the proposed Project associated with air quality and regional mobility are discussed in Sections IV.B. Air Quality, and Section IV.J., Traffic, Circulation, and Parking, of this Draft EIR, respectively.

(c) 2008 Regional Transportation Plan

The 2008 RTP was adopted by SCAG in May of 2008. This plan replaces the 2004 RTP in its entirety. It is a regional transportation vision through the year 2030 composed of two parts: a financially constrained plan and a strategic plan. Specifically, the goals of the 2008 RTP incorporate those from the 2004 Regional Transportation Plan including the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. In addition, the 2008 RTP expands on those goals to also encompass transportation security.

A conformity analysis of relevant goals from the 2008 RTP is presented under the Project Impacts subheading below. Air quality impacts are analyzed in greater detail in Section IV.B, Air Quality, of this Draft EIR.

(6) Southern California Air Quality Management District

(a) Air Quality Management Plan

The proposed Project is also located within the South Coast Air Basin and, therefore, falls under the jurisdiction of the SCAQMD. In conjunction with SCAG, the SCAQMD is responsible for formulating and implementing air pollution control strategies. The SCAQMD's Air Quality Management Plan (AQMP), adopted in 1997 by the SCAQMD and SCAG (and updated in 2007) to assist in fulfilling these responsibilities, is intended to establish a comprehensive regional air pollution control program leading to the attainment of state and federal air quality standards in the South Coast Air Basin, which is a non-attainment area for particulate matter larger than 2.5 microns in diameter ($PM_{2.5}$) and ozone. Air quality impacts of the proposed Project, including consistency with the AQMP and its contribution to greenhouse gas emissions, are analyzed in greater detail in Section IV.B, Air Quality, of this Draft EIR.

(7) Los Angeles County Metropolitan Transportation Authority

(a) Congestion Management Program

The Congestion Management Program (CMP) for Los Angeles County was developed in accordance with Section 65089 of the California Government Code. The CMP is intended to address vehicular congestion relief by linking land use, transportation and air quality decisions. Further, the program seeks to develop a partnership among transportation decision-makers to devise appropriate transportation solutions that include all modes of travel and to propose transportation projects which are eligible to compete for state gas tax funds. To receive funds from Proposition 111, (i.e., state gasoline taxes designated for transportation improvements) cities, counties, and other eligible agencies must implement the requirements of the CMP. Within Los Angeles County, the Metropolitan Transportation Authority is the designated congestion management agency responsible for coordinating the County's adopted CMP. Traffic impacts are analyzed in greater detail in Section IV.J, Traffic, Circulation, and Parking, of this Draft EIR.

(8) National Park Service Rim of the Valley Corridor Special Resource Study

The National Park Service is currently conducting the "Rim of the Valley Corridor Special Resource Study" as authorized by Congress under the Consolidated Natural Resources Act of 2008. The purpose of the study is to determine the suitability and

feasibility of designating all or some portion of a broad area of the mountains encircling the San Fernando, La Crescenta, Santa Clarita, Simi, and Conejo Valleys (referred to as the Rim of the Valley) as a part of the Santa Monica Mountains National Recreation Area. Based on the preliminary broad definition of the Rim of the Valley study area, the Project Site is included within the study. The National Park Service expects to publish a draft study report for public review and comment in 2014, prior to finalizing the report for transmittal from the Secretary of the Interior to Congress. The National Park Service study will not consider any alternatives that would adversely affect private property rights, and a new national park designation, if recommended by the study and authorized by Congress, would not give the National Park Service regulatory authority over any private land.[3]

3. Environmental Impacts

a. Methodology

(1) Land Use Consistency

The analysis of land use consistency impacts considers whether the proposed Project would be in substantial conformance with applicable plans, policies, and regulations that govern land use on the Project Site. The determination of land use consistency is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions pertaining to the Project Site. CEQA Guidelines Section 15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision-makers should address. A project is considered not inconsistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary intent of the land use plan or policy. If a project is determined to be inconsistent with specific objectives or policies of a land use plan, although not inconsistent overall with the land use goals of that plan and would not preclude the attainment of the primary intent of the plan, the project generally would be considered consistent with the plan.

(2) Land Use Compatibility

The analysis of land use compatibility determines whether the proposed Project would be compatible in terms of use, size, density, intensity, scale, and other physical and

[3] *National Park Service, U.S. Department of the Interior, Rim of the Valley Corridor Special Resource Study, Newsletter #1, Summer 2010.*

operational factors with surrounding land uses and development. The analysis is also intended to determine whether existing communities or land uses would be disrupted, divided, or isolated by the proposed Project with consideration given to the duration of any disruptions. The compatibility analysis is based on field surveys, aerial photography, and land use maps in which surrounding uses have been identified and characterized. The analysis addresses general land use relationships and urban form, based on a comparison of land use relationships in the Project area under existing conditions at the time of the Notice of Preparation (NOP) to the conditions that would occur with Project implementation.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to land use. These questions are as follows:

Would the project:

- Physically divide an established community?
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Conflict with any applicable habitat conservation plan or natural community conservation plan?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that the determination of significance regarding land use consistency and compatibility shall be made on a case-by-case basis, considering the following factors:

(1) Land Use Consistency

- Whether the proposal is inconsistent with the adopted land use/density designation in the Community Plan, redevelopment plan or specific plan for the site;
- Whether the proposal is inconsistent with the General Plan or adopted environmental goals or policies contained in other applicable plans;

Based on these factors, the proposed Project would be considered to have a significant land use consistency impact if it is found to be in substantial conflict with the adopted Community Plan or with the whole of relevant environmental policies in other applicable plans.

(2) Land Use Compatibility

- The extent of the area that would be impacted, the nature and degree of impacts, and the type of land uses within that area;
- The extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions; and,
- The number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the proposed project.

Based on these factors, the proposed Project would have a significant impact if the proposed Project would substantially and adversely change the existing land use relationships between the Project Site and existing off-site uses or would disrupt, divide, or isolate existing neighborhoods or communities.

c. Project Impacts

(1) Consistency with Land Use Policies and Regulations

This section analyzes the consistency and compatibility of the proposed Project with the provisions and requirements of the applicable state, regional and local plans that currently govern development of the proposed Project Site and surrounding areas.

(a) City of Los Angeles General Plan Land Use Element - Hollywood Community Plan

The Hollywood Community Plan includes several policies which are generally applicable to the proposed Project. Consistency and compatibility of the proposed Project with these policies is discussed in Table IV.H-1 on page IV.H-18. As Table IV.H-1 demonstrates, the proposed Project would be consistent with the Hollywood Community Plan. Therefore, land use consistency impacts with respect to the Hollywood Community Plan would be less than significant.

(b) City of Los Angeles General Plan Elements

The City of Los Angeles General Plan includes several other Elements which contain policies that are generally applicable to the proposed Project. These include the Conservation, Open Space, Transportation, Safety, and Noise Elements. Consistency and compatibility of the proposed Project with these policies is discussed in Table IV.H-2 on page IV.H-19. As Table IV.H-2 demonstrates, the proposed Project would be consistent with all Elements of the General Plan. Therefore, land use compatibility impacts with respect to the General Plan would be less than significant.

Table IV.H-1
Hollywood Community Plan Consistency Analysis

Hollywood Community Plan Policies [a]	Project Consistency Analysis
The Plan does not seek to promote nor hinder growth; rather, it accepts the likelihood that growth will take place and must be provided for.	The proposed Project would expand current facilities at Forest Lawn Memorial-Park - Hollywood Hills in order to provide spaces for interment and funeral resources to meet the regional demand for interment over a 40-year period. As such, the proposed Project would implement this policy by proposing growth which is consistent with, and provided for in the Hollywood Community Plan.
The Plan encourages the preservation of lower density residential areas.	The closest low density residential neighborhood to the Project Site is located to the northwest in the City of Burbank, between the Los Angeles River Flood Control Channel and the SR-134 Freeway. A second single family residential neighborhood is located directly north of the Project Site, across the SR-134 Freeway. The proposed Project does not propose any development within or adjacent to these residential areas. As discussed in Section IV.J, Traffic, Circulation, and Parking, neither the existing cemetery use nor the proposed Project would generate vehicle trips through these residential neighborhoods. In addition, as discussed in Section IV.A, Aesthetics, the Project Site is not visible from most off-site vantages (including these adjacent residential areas) due to the topography of the area. Thus, the character of these existing low density residential neighborhoods would be preserved and the proposed Project would be consistent with this policy of the Hollywood Community Plan.
As much of the remaining undeveloped land as feasible is to be preserved for open space and recreational uses.	The proposed Project Site as well as the adjacent properties to the south, east and west are all designated for open space in the Hollywood Community Plan. The proposed Project would be implemented within existing boundaries of the Forest Lawn Memorial-Park - Hollywood Hills facility, which has been dedicated and approved for cemetery use for over 60 years. The Project Site would continue to function as a much valued public benefit within the Hollywood Community Plan Area, as the proposed Project would be in keeping with the character of the existing Memorial-Park, including its open space areas. Thus, the proposed Project would be consistent with this policy of the Hollywood Community Plan.
New power lines should be placed underground, and a program for the undergrounding of existing lines should be developed.	The proposed Project would include extending electrical service within the Forest Lawn Memorial-Park - Hollywood Hills to provide for low level security lighting and power supply for new occupiable structures. All new power lines would be placed underground. Therefore, the proposed Project would be consistent with this policy of the Hollywood Community Plan.

[a] *This table lists only those policies contained in the Hollywood Community Plan that are applicable to the proposed Project.*

Source: Matrix Environmental, 2010

Table IV.H-2
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
Conservation Element Policies	
Section 3: Archaeological and Paleontological. Continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities. **Section 5: Cultural and Historical.** Continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition or property modification activities.	Currently, there are no known significant cultural resources located on the Project Site. However, the proposed Project includes mitigation measures to prevent the destruction of any archaeological or paleontological resources should they be found during construction of the proposed Project (see Section IV.D, Cultural Resources). Thus, with mitigation, the proposed Project would be consistent with this policy of the Conservation Element. The currently developed portion of the Project Site appears to be potentially eligible for designation as a designed historic landscape; however, the proposed Project is consistent with the historic use and would not result in a substantial adverse change in the significance of a historical resource. In addition, Griffith Park is designated a City of Los Angeles Historic-Cultural monument; however, the proposed Project would not result in significant impacts with respect to historic resources within Griffith Park.
Section 6: Endangered Species. Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts on sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.	There are no known endangered animal or plant species, habitats, or corridors within the Project Site. As discussed in Section IV.C, Biological Resources, any impacts to micro-corridor areas identified on the Project Site would be substantially minimized through the application of mitigation measures. Thus, with mitigation, the proposed Project would be consistent with this policy of the Conservation Element.
Section 8: Erosion. Continue to prevent or reduce erosion that will damage the watershed or beaches or will result in harmful sedimentation that might damage beaches or natural areas.	The proposed Project would be implemented in a manner that controls soil erosion during both the construction and operational phases, as identified in Section IV.E, Geology/Soils. During construction, erosion would be reduced through the use of appropriate erosion controls during site preparation and grading. In addition, and as discussed in Section IV.G, Hydrology/Water Quality, the required Storm Water Pollution Prevention Plans for the Project would address site erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. As a part of the National Pollution Discharge Elimination System permit requirements, the construction site would also be inspected before and after storms to identify stormwater discharge from construction activity, and to identify and

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
	implement controls where necessary. The operational phase would include the use of permanent drainage controls such as debris and runoff containment basins, and non-erosive drainage collection devices such as concrete V-ditches to prevent or reduce the potential for downstream erosion. Thus, with mitigation, the proposed Project would be consistent with this policy of the Conservation Element.
Section 12: Habitats. Continue to identify significant habitat areas, corridors and buffers and take measures to protect, enhance, and/or restore them.	As discussed in Section IV.C, Biological Resources, the Project Site does not function as a wildlife corridor. Potentially significant habitat impacts of the proposed Project would be mitigated to less than significant levels through the application of mitigation measures presented in Section IV.C, Biological Resources. Therefore, the proposed Project would be consistent with this policy of the Conservation Element.
Section 15: Land Form and Scenic Vistas. Continue to encourage and/or require property owners to develop their properties in a manner that will, to the greatest extent practical, retain significant existing land forms (e.g., ridgelines, bluffs, unique geologic features) and unique scenic features (historic, ocean, mountains, unique natural features) and/or make possible public view or other access to unique features or scenic views.	As discussed in Section IV.A, Aesthetics, the Project Site is surrounded by the Santa Monica Mountains to the south, east and west. The Project Site includes both sloped hillsides as well as flatter terrain, yet much of the Project Site's existing buildings, structures and natural areas are not visible from off-site locations due to the site's topography. While the proposed Project would disturb existing natural terrain within the southern portion of the Project Site, it would incorporate professional landscaping, such that the graded areas would continue to compliment the surrounding natural environment. Further, the proposed expansion of current facilities within the southern portion of the Project Site would not impede the existing visual access to the site; as planned phasing of construction (discussed in detail in Section II, Project Description) would minimize the visual impact on surrounding areas, and the areas proposed to be graded are not visible from Forest Lawn Drive (a designated scenic highway). In addition, the ridgelines within the vicinity of the Project site would not be affected by the Project. Therefore, the proposed Project would be consistent with this policy of the Conservation Element.
Section 16: Ocean. Continue to reduce pollutant discharge into the bays from both natural and human sources.	As discussed in Section IV.G, Hydrology/Water Quality, the proposed Project would be required to comply with specific planning guidance and control measures, and implement other municipal source detection and elimination programs and maintenance measures pursuant to the National Pollutant Discharge Elimination System permit program to control and mitigate stormwater quality and quantity impacts to receiving waters from new development. Pursuant to the requirements of the NPDES Program, the proposed

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
	Project would be designed so as to reduce water pollution to the maximum extent practicable. Therefore, with mitigation, the proposed Project would be consistent with this policy of the Conservation Element.
Section 18: Resource Management: Mineral Resources (Sand and Gravel). Continue to implement the provisions of the California Surface Mining and Reclamation Act (Public Resources Code Section 2710 et seq.) so as to establish extraction operations at appropriate sites; to minimize operation impacts on adjacent uses, ecologically important areas (e.g., the Tujunga Wash) and groundwater; to protect the public health and safety; to require the appropriate restoration, reclamation and reuse of closed sites.	A reclamation plan was approved by the Office of Mine Reclamation for a portion of the Project Site previously used for mining decomposed granite. Subsequently, the reclamation plan was implemented to the satisfaction of the Office of Mine Reclamation. Currently, submittal of an annual report and confirmation of financial assurance is the only requirement applicable to this portion of the Project Site. The proposed Project would include development of cemetery uses within the area governed by the approved reclamation plan, consistent with the potential subsequent uses identified for the reclaimed land. Thus, the proposed Project would be consistent with this policy of the Conservation Element.
Section 19: Resource Management. Continue to encourage energy conservation and petroleum product reuse.	As discussed in more detail in Section IV.K, Public Utilities, the proposed Project seeks to maximize environmental sustainability by incorporating energy conservation measures into the project. In addition, and as further discussed in Section IV.K.2, Water, the Project would continue to use reclaimed water for irrigation and will implement water reduction measures. Thus, the proposed Project would be consistent with this policy of the Conservation Element.
Open Space Element Policies	
Alteration of drainage patterns shall be minimized in the development of any land in mountain areas; Stream and wash areas should be conserved except where improvements are necessary to protect life and property.	As discussed in Section IV.C, Biological Resources, the proposed Project would include the alteration of drainage and basin features located on the Project Site in conformance with the California Department of Fish and Game and Army Corps of Engineers regulations applicable to such alterations, and mitigation measures required to minimize potential impacts to drainages. Importantly, proposed improvements to Drainage L would control stormwater runoff, which has historically contributed to mudflows and flooding impacts onto Forest Lawn Drive. In addition, proposed flood control improvements throughout the Project Site would themselves act to enhance both the flow rate and quality of tributary waters to the Los Angeles River Flood Control Channel, as well as the application of best management practices, compliance with the National Pollution Discharge Elimination System permit requirements and other water quality improvement measures, thereby improving the flood control capability and ecological functioning of the Los Angeles River

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
	Flood Control Channel. As such, with mitigation, the proposed Project would be consistent with this policy of the Open Space Element.
Multiple use of open space is considered especially important in proposed or existing areas of high density and/or intensity of development.	The Forest Lawn Memorial-Park - Hollywood Hills property is currently designated as Open Space and is used as a site for holding special events including school graduations, denominational conventions, conferences, temporary worship locations, and other large gatherings consistent with the overall use of the Memorial Park. The Project Site would continue to function as a location where open space is used for multiple activities and the Project would retain the current Open Space land use designation. Therefore, the proposed Project would be consistent with this policy of the Open Space Element.
The provision of malls, plazas, green areas, etc., in structures or building complexes and the preservation and provision of parks shall be encouraged; Private development should be encouraged to provide ample landscaped spaces, malls, fountains, rooftop green areas and other aesthetic features which emphasize open space values.	Under the proposed Project, Forest Lawn Memorial-Park - Hollywood Hills would continue to function as and provide for much valued green space, landscaped spaces and open space within the Hollywood Community Plan Area. In addition, existing areas of green space, landscaped spaces and open space which are an integral part of the existing Forest Lawn property would be expanded, and at buildout, the Project Site will include over 300 acres of green space, landscaped area and open space. Thus, the proposed Project would be consistent with this policy of the Open Space Element.
Open space areas shall be provided or developed to serve the needs as appropriate to their location, size and intended use of the communities in which they are located, as well as the City and region as a whole.	The Project Site is designated as Privately Owned Lands – Cemetery on the Open Space Plan. Consistent with this designation, the Project Site would continue to function as, and provide for the cemetery use under the proposed Project. Specifically, the proposed Project would expand current facilities and add new interment sites and related facilities needed to respond to the existing and increasing demand for interment and funeral resources in the greater Los Angeles area. Therefore, the proposed Project would be consistent with this policy of the Open Space Element.
Hazardous open space areas, including property especially subject to fire, steeply sloping hillsides and geologically unstable lands, are threats to the public safety. Proposals for their use should be evaluated in light of more restrictive grading requirements, better provision for access and lower densities and/or intensities of development.	The proposed Project would include development within hillside areas which may pose a threat from potential fire and geologic hazards. However, as discussed in Section IV.L, Public Services and Section IV.E, Geology/Soils, the proposed Project would be developed consistent with all applicable City Fire Codes and Building and Safety Codes, and mitigation measures are required that would ensure that potential impacts to public safety from fire and geologic hazards are minimized to insignificant levels. These include complying with Section 57.21.07 of the Fire Code pertaining to brush clearance in hillside areas and the

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
	preparation of site-specific geotechnical reports for each phase of development. Therefore, with compliance with applicable regulations and required mitigation, the proposed Project would be consistent with this policy of the Open Space Element.
Private development which occurs in proximity to desirable open space areas should include roads and trails adequate to serve both that development and the immediately adjacent recreation and open space areas.	The Project Site lies immediately adjacent to Griffith Park, which provides recreational open space areas that are widely accessible to the public. Due to the nature of the steep topography and thick vegetation along the Project Site's southern and eastern areas that border Griffith Park, no pedestrian access is currently available or planned as part of the Project development. The proposed Project would not impede or otherwise impact access to the roadways or trails in the immediate vicinity of the Project Site that provide access to Griffith Park.
Transportation Element Policies	
Policy 4.1: Seek to eliminate or minimize the intrusion of traffic generated by new regional or local development into residential neighborhoods while preserving an adequate collector street system.	As discussed in Section IV.J, Traffic, Circulation, and Parking, the Project is not expected to result in an increase in trip generation because the daily average number of internments and daily traffic volume are anticipated to remain stable. Assuming a hypothetical one percent increase every five years over the life of the Project, the proposed Project would generate approximately 239 additional daily trips (9 A.M. peak hour and 21 P.M. peak hour trips) onto the local street system surrounding the Project Site. These trip quantities are minor and well below the City criteria for triggering project traffic studies. Additionally, weekday peak trip generation from the proposed Project would generally occur between the off-peak traffic hours of 10:00 A.M. and 3:00 P.M., and as such, would not impact traffic during the typical commute hours when traffic volumes are greater. As further discussed in Section IV.J, Traffic, Circulation, and Parking, neither the existing cemetery use nor the proposed Project would generate vehicle trips through these residential neighborhoods. Thus, the proposed Project would not be expected to result in any significant increase in traffic or significant traffic impacts to the surrounding community, including residential neighborhoods located to the north and northwest. Therefore, the proposed Project would be consistent with this policy of the Transportation Element.
Policy 10.1: Implement the updated and revised 1996 City Bicycle Plan (Chapter IX of the Transportation Element).	The roadway segment along Forest Lawn Drive is improved with a bike lane. No revision or alteration of this existing bike lane would occur as a result of the proposed Project. Thus, the proposed Project would be consistent with this policy of the Transportation Element.

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
Policy 10.5: Ensure that sidewalks along all designated major and secondary highways are maintained at a minimum ten-foot width pending full dedication and improvement of these streets to the street standards set forth in the Transportation Element.	The proposed Project fronts Forest Lawn Drive which is designated as a Major Class II highway in the Transportation Element. Currently, Forest Lawn Drive is fully dedicated and improved consistent with the street standards identified in the Transportation Plan. No sidewalks are currently located on either side of Forest Lawn Drive in the Project vicinity. Therefore, the proposed Project is consistent with this policy of the Transportation Element.
Policy 11.2: Provide for protection and enhancement of views of scenic resources along or visible from designated scenic highways through implementation of guidelines set forth in this Transportation Element.	The Transportation Element provides for the protection and enhancement of scenic resources through the use of guidelines for construction of public projects within the public right-of-way. As the proposed Project does not include development within the public right-of-way, it would not be subject to these guidelines. Most of the property's uses are not visible from off-site vantage points due to the site's topographical limitations. As discussed in Section IV.A, Aesthetics, public views of the Project Site from along Forest Lawn Drive, a designated scenic highway, are also limited to few vantage points. Therefore, the proposed Project would be consistent with this policy of the Transportation Element.
Safety Element Policies	
Health/Environmental Protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a natural disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.	The proposed Project would be required to comply with the applicable City codes and regulations, as well as Project mitigation measures which address the routine use, handling storage and disposal of hazardous materials, as well as the accidental release of these substances, as discussed in Section IV.F, Hazardous Materials, of this Draft EIR. No potential impacts to the City's water supply have been identified from implementation of the proposed Project. Therefore, with mitigation, the proposed Project would be consistent with this policy of the Safety Element.
State and Federal Regulations. Assure compliance with applicable state and federal planning and development regulations (e.g., Alquist-Priolo Earthquake fault Zoning Act, State Mapping Act and Colby-Alquist Flood Plain Management Act).	The proposed Project would be required to comply with the applicable City codes and regulations, as well as Project mitigation measures which address geologic hazards and flood hazards, as discussed in Sections IV.E, Geology/Soils and Section IV.F, Hazardous Materials of this Draft EIR. Therefore, with mitigation, the proposed Project would be consistent with this policy of the Safety Element.
Standards/Fire. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression (i.e., peak load water and other standards, code requirements	The proposed Project would be required to provide for adequate fire protection services, consistent with the provisions of the City Fire Code, including fire flow, access, infrastructure, and hazard reduction and

Table IV.H-2 (Continued)
City of Los Angeles General Plan Consistency Analysis

General Plan Element	Project Consistency Analysis
such as minimum road widths, access, clearances around structures, and other requirements or procedures related to fire suppression).	management to the satisfaction of the City of Los Angeles Fire Department (see Section IV.L, Public Services). The Project would not result in the need for additional staffing or equipment. Therefore, the proposed Project would be consistent with this policy of the Safety Element.
Noise Element Objectives/Policies/Programs	
Objective 3 (Land Use Development): Reduce or eliminate noise impacts associated with the proposed development of land and changes in land use; **Policy 3.1:** Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts; **Program 11:** For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.	The proposed Project would comply with the City of Los Angeles noise ordinance and Project-specific mitigation measures as identified in Section IV.I, Noise, of this Draft EIR. Potential noise impacts to biological and ecological resources would be minimized with adherence to site design requirements and mitigation measures identified and discussed in Section IV.C, Biological Resources. The proposed Project would not result in any significant unavoidable impacts to any noise sensitive land uses as defined in the Noise Element. Thus, the proposed Project would be consistent with the Noise Element of the General Plan.

Source: Matrix Environmental, 2010

(c) Los Angeles River Revitalization Master Plan

As discussed under the "Relevant Land Use Policies" subheading above, the Los Angeles River Revitalization Master Plan is intended to improve the quality of the environment, water resources, and ecological functioning of the Los Angeles River. The proposed Project would further these goals by preserving and enhancing the flood control features of Drainage L and Sennett Creek. Importantly, the proposed flood control improvements to these contributing drainages would act to enhance both the flow rate and quality of tributary waters to the Los Angeles River through drainage improvements, application of best management practices, compliance with the National Pollution Discharge Elimination System permit requirements and other water quality improvement measures, thereby improving the flood control capability and ecological functioning of the Los Angeles River Flood Control Channel. As such, the proposed Project would be consistent with the goals of the Los Angeles River Revitalization Master Plan, and land use planning impacts would be less than significant.

(d) City of Los Angeles Planning and Zoning Code - Allowable Uses

The majority of the Project Site is currently zoned A1-1XL-H (agricultural zone), while a very small portion of the Project Site adjacent to Forest Lawn Drive is zoned RE40-1 (residential estate) (see Figure IV.H-1 on page IV.H-4 Zoning Designations). While the proposed Project includes land within both zoning designations, the new internment sites and cemetery-related facilities under the proposed Project would be located entirely on land which is zoned A1-1XL-H, while the small portion of the Project Site zoned RE40-1 would continue to be used in its current state (i.e., ground interments). Permitted uses within the agricultural zone include one-family dwellings, parks, playgrounds, community centers, golf courses, truck gardening, extensive agricultural uses, and home occupations, while permitted uses in the residential estate zone include all those allowed in the agricultural zone, with the exception of golf courses and extensive agricultural uses, but also including accessory living quarters. However, Section 14.00, Public Benefit Projects, of the LAMC identifies cemeteries as a public benefit use permitted in any zone or location, unless otherwise restricted, so long as specific performance standards or approved alternative compliance measures are met. Therefore, because the LAMC would not otherwise restrict the proposed cemetery use at this location, the proposed Project would be permitted on the Project Site (currently zoned A1-1XL-H and RE40-1) pursuant to Section 14.00, Public Benefit Projects, of the LAMC, provided that the specified performance standards (or approved alternate compliance measures specified in subsection B of Section 14.00) are met. As discussed in detail below, the proposed Project would conform with each of the performance standards applicable to Public Benefit Projects, and would meet the stated purposes of these performance standards (as set forth in Section 14.00 A.1(b)) of the LAMC:

1. All buildings on the site are at least 300 feet from any adjoining street or any A or R zoned property or residential use.

2. The areas of the approximate 444-acre Project Site proposed for development under the proposed Project are in the southern portion of the existing Forest Lawn Memorial-Park, the farthest part of the Project Site from Forest Lawn Drive. No new buildings are proposed within 300 feet of any adjoining street or any A or R zoned property or residential use. The proposed Project primarily consists of the development of ground space for interments, but also includes columbaria, wall crypts, mausoleums, and garden areas. Many of these uses are not within buildings and all buildings are at least 300 feet from any adjoining street or any A or R zoned property or residential use. In addition, given the nature of the use and the distance from nearby properties, and as discussed in Section IV.I, Noise, of this Draft EIR, the Project is further consistent with the purposes of the performance standard as set forth in Section 14.00 A.1(b), as noise levels created on the Project Site will not increase the ambient noise level

on adjoining or abutting properties after completion of the Project (i.e., long-term operational noise associated with vehicular activity occurring following construction).

3. Security night lighting is shielded so that the light source cannot be seen from adjacent residential properties.

4. As Section 14.00 A.1 (b) explains, lighting on the site should be located so as to not reflect on adjoining residential uses. The Project Site is not adjacent to any residential properties and light sources will not be visible to the nearest residential properties. Proposed lighting for the Project Site consists of standard lighting along the primary internal roads providing access to existing structures such as the Church of the Hills, the Old North Church and the Hall of Liberty through the center portion of the Project Site. Further, the proposed Project would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site.

5. There is a solid, decorative, masonry or wrought iron wall or fence at least eight feet in height, or the maximum height permittee by the zone, whichever is less. The wall or fence encircles the periphery of the property and does not extend into the required front yard setback.

   As Section 14.00 A.1(b) explains, a decorative wall or fence should be located to ensure protection for the site and adjacent uses. A wrought iron fence is provided along the northerly edge of the property adjacent to Forest Lawn Drive. Additional areas of the Project Site adjacent to undeveloped areas include a chain link fence along the property line, and other areas adjacent to undeveloped open space areas such as Griffith Park are otherwise maintained in their natural state. The 444-acre Project Site includes areas of varying topography and extensive vegetation, which serve to further buffer the Project Site. The Project is consistent with the purposes of the performance standard as set forth in Section 14.00 A.1(b) because the Project is located within the periphery of the existing Memorial-Park property and will thus be protected by the existing fences and natural barriers which also protect adjacent uses.

6. The front yard setback is as least as deep as the setback required by the zone.

   The proposed Project is not located within the front yard area of the existing Forest Lawn Memorial-Park and will not affect the property's existing front yard setback.

7. The property is improved with a ten foot landscaped buffer along the periphery of the property which is maintained and is equipped with an automatic irrigation system.

   As noted above, the proposed Project primarily is located in the southern portion of the existing Forest Lawn Memorial-Park, bounded by Griffith Park. The Project Site will largely consist of lawn property and garden areas. Landscaped buffer areas will be maintained and equipped with an automatic irrigation system. Other areas adjacent to Griffith Park will be maintained in their natural state.

8. The site has only one double-faced monument sign, with a maximum of 20 square feet per side.

   As Section 14.00 A.1(b) explains, signage, where permitted by City regulations, should not exceed in size or number those located on the same block or across the street from the site. The existing Forest Lawn Memorial-Park includes entry signage exceeding 20 square feet per side that was previously permitted pursuant to an existing Conditional Use Permit granted in the 1960's, prior to the current regulations. The Project does not propose any additional entry signage on the Project Site, and, as an extension of the existing cemetery, the proposed Project will rely on existing approved entry signage.

9. All graffiti on the site is removed or painted over in the same color as the surface to which it is applied within 24 hours of its occurrence.

   As Section 14.00 A.1(b) explains, graffiti should be prevented and eliminated when it is found on the site. Graffiti is not anticipated to occur at the Project Site given its location within the existing cemetery; however, any graffiti will be eliminated when it is found on the site.

10. All streets, alleys or sidewalks adjoining the property meet standard street dimensions.

    As Section 14.00 A.1(b) explains, City streets should meet City standards in order to ensure safe vehicular ingress and egress to the site and to ensure that traffic does not exceed the current level of service. Ingress and egress to the main buildings or uses on the Project Site is sufficient to accommodate expected usage by the public and/or occupants of the facility. Access to and from the Project Site is from Forest Lawn Drive and is sufficient to meet City requirements. The dimensions and configuration of Forest Lawn Drive meet City standards for a Major Class II Highway. Safe vehicular ingress and egress to the site is thus ensured, and ingress and egress to the main buildings and uses on the site will be sufficient to accommodate expected usage by the public

which is not expected to exceed the current level of service. No sidewalks currently adjoin the Project Site.

11. The use meets the parking requirements of Section 12.21 A.

    As Section 14.00 A1(b) explains, sufficient off-street parking should be provided so as to preclude the need for utilization of on-street parking by the use allowed on the site. Currently, parking for visitors, employees and funeral attendees at the existing Forest Lawn Memorial-Park is provided on-site and patrons/employees do not park on Forest Lawn Drive. The proposed Project will continue to meet the parking requirements of Section 12.21 A and will preclude the need for utilization of on-street parking.

12. The property has sufficient areas for assembly.

    As Section 14.00 A.1(b) explains, assembly areas for funeral services should be located so as to not block the City streets. The existing cemetery uses and the proposed Project contain sufficient areas for assembly on-site that do not affect City streets. Visitors, employees and funeral attendees park and assemble on-site and do not affect Forest Lawn Drive.

Thus, with the approval of a Public Benefits Project for the proposed Project, the proposed cemetery use would be consistent with the zoning code.

The conceptual site plan for the proposed Project includes a 90-foot bell tower in the East Area, near the proposed outdoor chapel. The bell tower would be a non-occupiable architectural feature. The Project also proposes mausoleums in the Central and West Areas, which would be comprised of two to five levels for interment areas. Each level of the proposed mausoleums would be approximately 20 feet, and they may be built incrementally as additional interment space is needed. The mausoleums may include a central feature to provide access to all five levels that may reach up to 100 feet in height. To the extent that any proposed Project structures, such as the bell tower, exceed the height limitations imposed by the zoning code, the Project will include a request for either a variance or an alternative compliance measure pursuant to the public benefit provisions of the zoning code.

(e) Compass Blueprint Growth Vision

The proposed Project is located within a 2% Compass Growth Strategy opportunity area, and as such, would be subject to the Growth Vision's key principles. As discussed above, the Growth Vision's four key principles are: (1) Mobility, (2) Livability, (3) Prosperity, and (4) Sustainability. As also mentioned above, the specific components of these four key principles applicable to the proposed Project are listed under the Livability and Sustainability Principles and include: (1) Support the preservation of stable, single-family

neighborhoods; (2) Preserve rural, agricultural, recreational and environmentally sensitive areas; (3) Focus development in urban centers and existing cities; (4) Develop strategies to accommodate growth that use resources efficiently, and minimize pollution and waste; and (5) Use "green" development techniques. The Project's consistency with each of these components is discussed in detail below:

(i) Support the preservation of stable, single-family neighborhoods

All Project development would occur within the existing boundaries of the Forest Lawn Memorial Park – Hollywood Hills property, which has been dedicated and approved for cemetery use for over 60 years. Single-family residential neighborhoods to the north are buffered from the Forest Lawn Memorial Park – Hollywood Hills property by Forest Lawn Drive, the Los Angeles River Flood Control Channel, and the SR-134 Freeway. As such, Project development would not occur adjacent to or within the immediate vicinity of single-family neighborhoods. Additionally, the majority of Project development would occur towards the southern portion of the Project Site, which is the portion of the Project Site furthest away from nearby residential uses. As discussed in Section IV.J., Traffic, Circulation, and Parking, the proposed Project would not generate traffic through the nearby single-family neighborhoods. Moreover, all on-site artificial light sources would continue to be contained on-site and obstructed from the vantage point of nearby neighborhoods in accordance with the Project's Lighting Plan. Lastly, while several of the proposed structures are larger in scale than the existing site improvements, this increase in scale is incremental and consistent with existing development on the Project Site and in the Project vicinity. As such, the Project would not result in an increase in density that would interfere with the stability of residential development in the project vicinity. Therefore, the proposed Project would be consistent with goal to support the preservation of single-family neighborhoods.

(ii) Preserve rural, agricultural, recreational and environmentally sensitive areas

The Forest Lawn Memorial-Park – Hollywood Hills property is currently designated as Open Space and is used as a site for holding special events including school graduations, denominational conventions, conferences, temporary worship locations, and other large gatherings. The Project Site would continue to function as an area of public benefit, where open space is used for multiple activities. Moreover, the Project Site would retain the current Open Space land use designation. Existing areas of green space, landscaped spaces and open space which are an integral part of the existing Forest Lawn Memorial Park – Hollywood Hills property would be expanded, and at buildout, the Project Site will include over 300 acres of green space, landscaped area and open space. Although the proposed Project would include the alteration of drainage and basin features located on the Project Site, these alterations would be completed in conformance with the California Department of Fish and Game and Army Corps of Engineers regulations applicable to such alterations, and mitigation measures required to minimize potential

impacts to drainages. As such, any potentially significant habitat impacts of the proposed Project would be mitigated to less than significant levels through the application of mitigation measures presented in Section IV.C, Biological Resources. No agricultural lands are located in the vicinity of the Project Site. As such, the proposed Project would be consistent with the goal to preserve rural, agricultural, recreational and environmental sensitive areas.

(iii) Focus development in urban centers and existing cities

As mentioned above, the proposed Project would be implemented within existing boundaries of the Forest Lawn Memorial-Park – Hollywood Hills property, which has been dedicated and approved for cemetery use for over 60 years. The proposed Project would continue and expand these existing on-site cemetery uses. The Forest Lawn Memorial Park – Hollywood Hills property is located in a portion of the City of Los Angeles that is supported by a fully developed roadway and utilities infrastructure. Additionally, the proposed Project would not result increase traffic on area roadways such roadway upgrades or capacity improvements would be required. Therefore, the proposed Project would be consistent with the goal to focus development in urban centers and existing cities.

(iv) Develop strategies to accommodate growth that use resources efficiently, and minimize pollution and waste

The proposed Project would be designed to use resources efficiently, in that it would continue and expand existing on-site uses for which there is an established support infrastructure. To minimize the use of resources, the Project Site would continue to utilize reclaimed water for landscaping irrigation. Regarding pollution and waste, the proposed Project would be required to comply with the applicable Federal, State, and City codes and regulations, as well as Project mitigation measures, which address the routine use, handling storage and disposal of hazardous materials and the accidental release of these substances. As discussed in Section IV.F, Hazardous Materials, of this Draft EIR, all on-site hazardous materials would be handled in accordance with applicable regulations and manufacturers' recommendations, and also within the provisions of the Project's Unified Program Form. Further, as discussed in Section IV.G, Hydrology/Water Quality, of this Draft EIR, Project construction and operation would be required to implement the requirements of the National Pollutant Discharge Elimination System, which would include both short- and long-term best management practices to reduce the potential for pollution and sediment to enter stormwater flows. Therefore, the proposed Project would be consistent with the goal to develop strategies to accommodate growth that use resources efficiently, and minimize pollution and waste.

(v) Use "green" development techniques

As discussed in more detail in Section IV.K, Utilities, the proposed Project seeks to maximize environmental sustainability by incorporating energy efficient fixtures and water conservation measures into the project. In addition and as further discussed in Section IV.K.2, Water, the Project Site would continue to use reclaimed water for irrigation. Therefore, the proposed Project would be consistent with the goal to use "green" development techniques.

As a result, the proposed Project would minimize its impacts upon the environment and would thus be consistent with the SCAG's Growth Visioning goals.

(f) 2008 Regional Transportation Plan

The 2008 RTP includes several goals which are generally applicable to the proposed Project. Consistency and compatibility of the proposed Project with these goals is discussed in Table IV.H-3 on page IV.H-33. As Table IV.H-3 demonstrates, the proposed Project would have a less than significant impact with respect to the Regional Transportation Plan goals.

(2) Land Use Compatibility

This section analyzes the compatibility of the proposed Project on the Project Site, and with existing adjacent land uses, considering the factors relevant to compatibility presented above as thresholds of significance.

(a) Construction Related Impacts

Construction of the proposed Project could cause temporary and intermittent affects on adjacent land uses due to temporary increases in air emissions (including fugitive dust), noise, and traffic congestion, as well as the use of heavy equipment for demolition, site grading and excavation, soil hauling, rock blasting and crushing, paving, and building fabrication. Construction activities could necessitate temporary lane closures on streets adjacent to the Project Site on a temporary and intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities as may be required. However, site deliveries and the staging of all equipment and materials would be organized in the most efficient manner possible on-site to avoid impacts to the neighborhood and surrounding traffic circulation. These lane closures, and the associated traffic control plans necessary for such closures, would be reviewed and approved by the appropriate City agencies prior to any closure. Furthermore, as discussed in detail in Sections IV.B, Air Quality; IV.I, Noise; and IV.J, Traffic, Circulation, and Parking, of this Draft EIR, implementation of the recommended construction related mitigation measures

Table IV.H-3
2008 Regional Transportation Plan Consistency Analysis*

Regional Transportation Plan Goals	Project Consistency Analysis
Maximize mobility and accessibility for all people and goods in the region; Ensure travel safety and reliability for all people and goods in the region.	As discussed in Section IV.J., Traffic, Circulation, and Parking, the Project is not expected to result in an increase in trip generation because the daily average number of internments and daily traffic volume are anticipated to remain stable. Assuming a hypothetical percentage increase every five years over the life of the Project, the proposed Project would generate approximately 239 additional daily trips (9 A.M. peak-hour and 21 P.M. peak-hour trips) onto the local street system surrounding the Project Site. These trip quantities are minor and well below the City criteria for triggering project traffic studies. It should also be noted that the time of day when Forest Lawn Memorial–Park - Hollywood generates its peak weekday trips generally occurs between the off-peak traffic hours of 10:00 A.M. and 3:00 P.M., and would not be anticipated to impact traffic during the typical commute hours when traffic volumes are greater. Thus, the proposed Project is not expected to result in any significant impact to mobility or accessibility within the regional transportation system. Thus, the proposed Project would be compatible with this goal of the Regional Transportation Plan.
Maximize the productivity of the transportation system.	As with existing conditions, the time of day when the proposed Project would generate its peak weekday trips occurs between the off-peak traffic hours of 10:00 A.M. and 3:00 P.M., and would not be anticipated to impact traffic during the typical commute hours when traffic volumes are greater. Thus, the existing productivity of the transportation system would not be impaired and the proposed Project would be compatible with this goal of the Regional Transportation Plan.
Protect the environment, improve air quality, and promote energy efficiency.	As identified in each Environmental Impact Analysis subsection (IV.A through IV.L) of this Draft EIR, the proposed Project would include various mitigation measures to reduce potentially significant impacts below significant levels, thereby protecting the environment. Because the proposed Project would be in conformance with the Air Quality Management Plan, whose goal it is to improve air quality in the region, the proposed Project would contribute incrementally to improved regional air quality. In addition, and as discussed in Section IV.K, Utilities, the proposed Project seeks to maximize environmental sustainability by incorporating energy efficient fixtures and water conservation measures into the project. Thus, the proposed Project would be compatible with this goal of the Regional Transportation Plan.
Encourage land use and growth patterns that complement transportation investments.	The proposed Project would be served by the existing roadway and freeway transportation system, including the I-5 Freeway. The Southern California Association of Governments has recently provided $507 million for High-Occupancy Vehicle and truck lane improvements on the I-5 Freeway. While the proposed Project itself would result in a negligible traffic impact, as presented in Section IV.J, Traffic-Circulation, these planned improvements on the I-5 Freeway would support and complement the proposed Project, consistent with this goal of the Regional Transportation Plan.

[a] *This table lists only those goals contained in SCAG's 2008 Regional Transportation Plan that are applicable to the proposed Project.*

Source: Matrix Environmental, 2010

pertaining to air quality, traffic and noise impacts would further reduce construction-related land use impacts upon adjacent land uses. Thus, land use impacts associated with construction of the proposed Project would be less than significant.

(b) Operational Impacts

The proposed Project would continue the cemetery-related uses on the Project Site, with no additional land area being added to the existing Memorial-Park boundaries. The Project Site is located within an area designated for open space land uses in the Hollywood Community Plan, and is consistent with the existing physical arrangement of properties within the vicinity of the Project Site, including Forest Lawn Drive, the Los Angeles River Flood Control Channel and the SR-134 Freeway to the north, Griffith Park and the Santa Monica Mountains to the south and east, contiguous undeveloped land owned by the Forest Lawn Memorial-Park Association to the west, and Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California Inc., to the north and northeast. The Project Site is buffered from both residential uses and studio office uses to the north by Forest Lawn Drive, the SR-134 Freeway and the Los Angeles River Flood Control Channel. In addition, a substantial portion of the Project Site's uses are not visible from off-site vantage points due to the topography of the immediate area. Moreover, as discussed in Section IV.A, Aesthetics, of this Draft EIR, the proposed Project's heights and building design would be generally consistent with what currently occurs on the Project Site and appropriate to the topography of the Project Site and surrounding area. While some building heights would increase with implementation of the proposed Project, new development would not present a contrast to the existing buildings of the Forest Lawn Memorial-Park - Hollywood Hills property or surrounding area. Within the current graded, but undeveloped areas at the east and west ends of the Project Site, new development would represent a visual improvement as it would introduce buildings, landscaping, and open space area that would be consistent with existing on-site development. Thus, the proposed Project land uses would be compatible with those in the immediately adjacent and surrounding area. Access to the Project Site, which is not visible from most locations in the surrounding community due to topography, is available only from Forest Lawn Drive. The proposed Project would provide approximately 22,500 square feet of floor area for new structures, approximately 1,100,000 square feet of non-floor area, and approximately 200,000 new interment sites to meet the regional demand for interment and funeral services, thereby providing a public benefit use consistent with existing and surrounding land uses.

The proposed Project would not involve the permanent closure of any streets or sidewalks, and no separation of uses or disruption of access between land use types would occur. As previously stated, the proposed Project would be developed entirely within the existing boundaries of the Project Site. As such, it would not divide an established community. Rather, it would add new interment sites and cemetery-related structures, as

well as renovate and expand existing structures and reception-related uses within the existing cemetery property. Overall, the proposed Project would be expected to better incorporate the Project Site into the surrounding community as approval of this Public Benefits Project requires that specific performance standards are met whose purpose is to ensure that the proposed land use would be consistent with the adjacent land uses (see Public Benefits Approval discussion under Environmental Setting). Therefore, potential impacts associated with land use compatibility would be less than significant.

4. Cumulative Impacts

Cumulative land use impacts could occur if other related projects in the vicinity of the proposed Project Site would result in land use incompatibility effects in conjunction with the impacts of the proposed Project. The proposed Project would implement important local and regional goals and policies for the Hollywood Community area, which would assist the City of Los Angeles in achieving short- and long-term planning goals and objectives. Future development associated with related projects would be subject to the same development standards as the proposed Project, specifically with respect to the Hollywood Community Plan, the Planning and Zoning Code, and other regional land use plans. Related projects outside of the Hollywood Community Plan would be required to follow the development standards of the respective Community Plan and/or any other such applicable plans under whose jurisdiction they rest. Conformance with these standards would ensure that related development would not result in incompatible land uses. Therefore, no significant cumulative land use impacts are anticipated.

5. Mitigation Measures

Implementation of the proposed Project would result in less than significant impacts with respect to land use. Therefore, no mitigation measures are required.

6. Level of Significance After Mitigation

The proposed Project would have a less than significant impact with consistency with land use policies and plans and land use compatibility. Thus, no mitigation measures are required..

IV. Environmental Impact Analysis

I. Noise

1. Introduction

This section evaluates the potential noise and vibration impacts that would result from the proposed Project. Specifically, the analysis describes the existing noise environment within the Project area, estimates future noise and vibration levels at surrounding land uses resulting from construction and operation of the proposed Project, identifies the potential for significant impacts, and provides mitigation measures to address potentially significant impacts. In addition, an evaluation of the potential cumulative noise impacts of the proposed Project together with related projects and future project growth is also provided. Noise calculation worksheets are included in Appendix H of this Draft EIR.

2. Environmental Setting

a. Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table IV.I-1 on page IV.I-2, illustrates representative noise levels in the environment.

Table IV.I-1
Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: California Department of Transportation, 1998.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs.

The equivalent energy noise level (L_{eq}) is a measure of ambient noise, while the day-night average level (L_{dn}) and community noise exposure level (CNEL) are measures of community noise. Each is applicable to this analysis and defined as follows:

- L_{eq}, the equivalent continuous sound level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.

- CNEL, community noise equivalent level, is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

- L_{min} expresses a measurement of the minimum instantaneous noise level experienced during a given period of time.

- L_{max} expresses a measurement of the maximum instantaneous noise level experienced during a given period of time.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Indoor CNEL noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

When evaluating changes in 24-hour community noise levels, a difference of 3 dBA is a barely perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding, can either intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., when the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., when the area between the source and receptor is loose soil or sand or is vegetated, including grass). Noise from stationary or point sources is generally reduced by approximately 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures. For example, a solid wall or berm can reduce point noise sources by up to 20 dBA.[1] Typical sound level reductions of buildings in warm climate regions such as Southern California is 12 dBA with the windows open and 24 dBA with closed windows.[2]

b. Fundamentals of Vibration

Vibration is an oscillating motion that travels through the ground. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. The ground motion caused by vibration can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root-mean-square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square-root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response to ground-borne vibration.[3] The RMS vibration velocity level can be presented in inches per second or in VdB (a decibel unit referenced to 1 micro-inch per second).[4]

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[1] *Engineering Noise Control, D.Bies & C.H. Hansen, 1988.*

[2] *U.S. Environmental Protection Agency (EPA), "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety", March 1974, Table B-4.*

[3] *Federal Transit Administration (FTA), "Transit Noise and Vibration Impact Assessment", May 2006, Section 7.1.2.*

[4] *VdB (velocity level in decibel) = 20 x Log (V / V_{ref}), where V is the RMS velocity amplitude in micro-inch per second and V_{ref} is the reference velocity amplitude of $1x10^{-6}$ inch per second (1 micro-inch per second). All vibration levels described in decibel (VdB) in this study are RMS and referenced to 1 micro-inch per second.*

- The background vibration velocity level in residential and educational areas is usually around 50-55 VdB.[5] The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

- The following descriptors are also used in evaluating noise and vibration impacts, particularly with regard to blasting activities:

- Airblast or Air Overpressure - Generally referring to the type of noise levels produced by a blasting action, an airblast is a sudden rise in standard air pressure. An airblast or air overpressure is an impulsive sound generated by an explosive blast and results in rock fragmentation and movement. As described below, airblast levels can be described in terms of peak air overpressure (in pounds per square inch, psi) or in decibels (dB, linear peak). The intensity of the air overpressure is based primarily on the amount of explosive materials used (commonly referred to as charge weight) and the below grade distance at which charges are detonated. Other factors, such as terrain features, and atmospheric conditions, including temperature gradients, affect the air overpressure intensity and propagations. In this section, the terms airblast and air overpressure are used interchangeably.

- Peak Linear Sound Level (dB) – Represents the un-weighted instantaneous peak of the sound pressure wave. It is commonly used to describe an airblast and its typical low frequency energy. This descriptor is different than the A-weighted sound pressure level (dBA) typically used to describe common environmental noise levels.

- Peak Particle Velocity (PPV) - PPV is defined as the maximum instantaneous peak of the vibration signal in velocity. In this section, PPV is presented in inch/second velocity amplitudes. PPV is typically used for evaluating potential building damage, as well as evaluating human response to ground-borne vibration.[6]

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[5] *FTA Transit Noise and Vibration Assessment, Figure 7-3, May 2006.*

[6] *Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, 2004.*

c. Regulatory Setting

(1) Federal

The Federal studies and criteria described below do not include specific regulations or criteria that the Project is required to adhere to. Rather, the studies and criteria described below are used for analytic purposes to formulate methodologies and significance thresholds for noise and vibration associated with controlled blasting and vibration that are not currently provided by the Los Angeles CEQA Thresholds Guide.

(a) Noise Regulations

(i) United States Bureau of Mines

The U.S. Bureau of Mines (USBM) conducted a study on structure response and damage produced by an airblast (i.e., blasting related noise levels). Based on this study, USBM recommends safe threshold limits that range from 105 to 134 dB for residential building damage.[7] As described therein, the range in the airblast limits as given by the USBM is dependent on the type of the sound measuring instruments used to record the airblast noise levels. With respect to human annoyance, the USBM documentation indicates that airblast noise levels that reach and exceed 120 dB may cause human annoyance due to structural rattling and associated fright or startling.

(ii) Office of Surface Mining Reclamation and Enforcement (OSM)

The Office of Surface Mining Reclamation and Enforcement (OSM) has published a document titled *"Blasting Guidance Manual"* that addresses the negative effects of blasting.[8] The OSM Guidance Manual includes noise and vibration limits with respect to building damage and human perception.[9] The OSM airblast noise limits with respect to building damage are similar to those of the USBM. The OSM airblast limits for building damage apply to the location of any dwelling, public building, school, church, community or institutional building in connection with blasting under the jurisdiction of the OSM. Based on OSM data, a 129 dB peak noise level is utilized for evaluating building damage impacts associated with the Project's blasting related activities. This airblast limit set forth by the OSM is based on the minimal probability of superficial damage to residential type

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[7] *USBM Report of Investigations 8485, Structure Response and Damage Produced by Airblast From Surface Mining, 1980.*

[8] *OSM, Blasting Guidance Manual, 1987.*

[9] *OSM Blasting Performance Standards, 30 Code of Federal Regulation, Section 816, 1986.*

structures, and also takes into consideration subjective human response. Per the OSM, if an airblast can be kept at or below 120 dB (Linear), then annoyance would be minimal. Thus, for purposes of this analysis, the 120 dB threshold is utilized in connection with the analytical evaluation of the potential human annoyance from the Project's blasting generated noise levels.

(b) Vibration Regulations

(i) Federal Transit Administration (typical construction activities)

The Federal Transit Administration (FTA) has published a technical manual titled, "Transit Noise and Vibration Impacts Assessment" that provides ground-borne vibration impact criteria with respect to human annoyance and building damage during construction activities (non-blasting activities).[10] With respect to human annoyance, the FTA provides criteria for various land use categories based on the frequency of vibration events, as indicated in Table IV.I-2 on page IV.I-8. As indicated therein, the thresholds for human annoyance range from 65 VdB to 83 VdB depending upon type of use and the frequency of the event.

With respect to potential building damage (primarily from typical construction activities excluding blasting activities), the FTA provides guidelines for the evaluation of potential ground-borne vibration damage applicable to various building categories. Table IV.I-3 on page IV.I-8 provides the FTA vibration criteria applicable to various building types. As indicated therein, a vibration criterion of 0.12 inch per second should be considered for buildings extremely susceptible to vibration damage, while a vibration criterion of 0.50 inch per second should be used for structures or buildings constructed of reinforced-concrete, steel, or timber.

(ii) United States Bureau of Mines

The USBM has published a report regarding the blasting-induced ground vibration titled *"Structural Response and Damage Produced by Ground Vibration from Surface Mine Blasting"* that provides limits on ground vibration generated by blasting activities that are under USBM's jurisdiction.[11] In this report, the USBM concludes that the use of the PPV vibration metric (peak particle velocity) is the most practical descriptor for regulating the damage potential to single-family residential structures. According to the USBM, safe

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[10] *Federal Transit Administration, "Transit Noise and Vibration Impact Assessment", May 2006.*

[11] *USBM Report of Investigations 8507, Structural Response and Damage Produced by Ground Vibration from Surface Mine Blasting, 1980.*

Table IV.I-2
FTA Vibration Impact Criteria – Typical Human Annoyance Levels

Land Use Category	Ground-Borne Vibration Impact VdB (referenced 1 micro-inch per second)		
	Frequent Events [a]	Occasional Events [b]	Infrequent Events [c]
Category 1: Buildings where vibration would interfere with interior operations	65 VdB [d]	65 VdB [d]	65 VdB [d]
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB

[a] *"Frequent Events" are defined as more than 70 vibration events of the same source per day.*

[b] *"Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.*

[c] *"Infrequent Events" are defined as fewer than 30 vibration events of the same source per day.*

[d] *This criterion limit is based on the levels that are acceptable for most moderately sensitive equipment such as optical microscopes.*

Source: FTA, 2006.

Table IV.I-3
FTA Vibration Impact Criteria – Typical Levels for Building Damage

Building Category	Construction Vibration Damage Criteria	
	PPV (inch per second)	RMS[a] (VdB)
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

[a] *Root-Mean-Square is defined as the square-root of the average of the squared amplitude of the vibration signal.*

Source: FTA, 2006.

levels of ground vibration from a blasting range from PPV of 0.5 to 2.0 inch/second for residential-type structures. The damage thresholds are a function of the frequency spectrum of the ground vibration experienced by the structures and the types of structures receiving the ground vibrations. Table IV.I-4 on page IV.I-9 provides the safe vibration

Table IV.I-4
USBM Blasting Vibration Limits

Type of Structure (exposed to ground vibrations)	Vibration Frequency spectrum Hz	Vibration Amplitude Maximum Peak Particle Velocity, inch/second
All residential structures	Above 40 Hz	2.00
Houses with gypsum board	Below 40 Hz	0.75
Houses with plaster on lath interior	Below 40 Hz	0.50

Note: Per USBM requirements ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

Source: USBM RI 8507 Structural Response and Damage Produced by Ground Vibration From Surface Mine Blasting, 1980.

limits for blasting as recommended by the USBM. With respect to human annoyance from ground vibration (generated by blasting), the USBM study concludes that approximately 5 to 10 percent of the people will judge PPV levels of 0.5 to 0.75 inch/second as "less than acceptable."

(iii) Office of Surface Mining Reclamation and Enforcement (OSM)

Table IV.I-5 on page IV.I-10 presents the maximum allowable ground vibration levels as a function of distance from the blasting area set forth by the OSM. The vibration limits apply to blasting under the jurisdiction of OSM and address impacts to any dwelling, public building, school, church, or community or institutional building. With respect to human annoyance from ground vibration (generated by blasting activities), the OSM Guidance Manual concludes that complaints can be expected at 0.25 inch/second (ground-borne vibration), a level that is eminently safe.

(2) State

(a) Caltrans Guidelines

The California Department of Transportation (Caltrans) also provides guidelines for assessing human response to blasting related construction activities and the potential for structural damage related to blasting in a study titled, "*Transportation- and Construction-Inducted Vibration Guidance Manual*."[12] As indicated by this study, human response to vibration and air overpressures from blasting is difficult to quantify. Furthermore, it is

[12] *Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, 2004.*

Table IV.I-5
OSM Blasting Vibration Limits for Building Damage[a]

Distance from Blasting Site to nearest Vibration Receptor, feet	Maximum Allowable Peak Particle Velocity for Ground Vibration at a Given Distance,[b] inch/second
0 to 300	1.25
301 to 5,000	1.00
5,001 and beyond	0.75

[a] *These vibration limits are applicable to any dwelling, public building, school, church, community or institutional building in connection with blasting activities under the OSM's jurisdiction.*

[b] *Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements. It should be noted that the maximum allowable peak velocity shown is higher for a structure located closer to the blast site. This is because of the fact that the higher frequencies (ground-borne vibration generated by blasting) are less damaging to structures than lower frequencies, and that the closer to the blast, the higher are the frequencies (ground-borne vibration).*

Source: OSM Blasting Performance Standards, 30 CFR, Section 816, 1986.

anticipated that ground vibration and air overpressures can be felt at levels that are well below those required to produce any damage to structures. Table IV.I-6 on page IV.I-11 provides the range of blasting-induced ground vibration levels in PPV and dB units, as well as human perception at these the noted levels. The vibration perceptions as described are the average human response to blasting induced vibration and air overpressures that may be anticipated when a person is at rest and situated in a quiet surrounding.

Caltrans also provides guidelines/recommendations to limit ground-borne vibration based on the age and/or physical condition of the structures that are located in close proximity to construction activity. Table IV.I-7 on page IV.I-11 presents Caltrans' recommended building damage criteria relative to ground vibration. As indicated therein, while modern industrial/commercial buildings can endure vibration levels from transient sources (transient sources created by a single isolated vibration event, such as blasting) up to a maximum of 0.5 inch per second PPV, historic structures have a much lower vibration tolerance of 0.25 inch per second PPV. Similarly, while industrial/commercial buildings can endure vibration levels from continuous/frequent intermittent sources (continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment) up to a maximum of 0.50 inch per second PPV, historic structures have a much lower vibration tolerance of 0.08 inch per second PPV.

Table IV.I-6
Human Response to Blasting Ground Vibration and Air Overpressure – Caltrans[a]

Average Human Response	Ground Vibration, PPV (inch/second)	Airblast, dB
Barely to distinctly perceptible	0.02 – 0.10	50 – 70
Distinctly to strongly perceptible	0.10 – 0.50	70 – 90
Strongly perceptible to mildly unpleasant	0.50 – 1.00	90 – 120
Mildly to distinctly unpleasant	1.00 – 2.00	120 – 140
Distinctly unpleasant to intolerable	2.00 – 10.00	140 – 170

[a] *This table provides the average human response to blasting induced vibration and air overpressures that may be anticipated when a person is at rest, situated in a quiet surrounding.*

Source: Caltrans, Transportation- and Construction-Inducted Vibration Guidance Manual, 2004.

Table IV.I-7
Caltrans Guidelines - Typical Vibration Damage Thresholds

Structure and Condition	Maximum PPV (inch per second)	
	Transient Sources [a]	Continuous/Frequent Intermittent Sources [b]
Extremely fragile buildings, ruins ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

[a] *Transient sources created by a single isolated vibration event, such as blasting.*

[b] *Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.*

Source: Caltrans, 2004.

(3) Local

(a) City of Los Angeles Noise Regulation

The City of Los Angeles is the local agency responsible for adopting and implementing policies as they relate to noise and its effect on land uses within its

jurisdiction. Both acceptable and unacceptable noise levels associated with construction activities, roadway noise levels and ambient noise levels must be defined and quantified. The City of Los Angeles has numerous ordinances and enforcement practices that apply to intrusive noise as well as ones that guide new construction. The City's comprehensive noise ordinance, Chapter XI of the Los Angeles Municipal Code (LAMC), sets forth sound measurement and criteria, maximum ambient noise levels for different land use zoning classifications, sound emission levels for specific uses, hours of operation for certain uses, standards for determining when noise is deemed to be a disturbance to the peace, and legal remedies for violations.

In particular, Section 41.40 of the LAMC prohibits construction activity (including demolition) and repair work where the use of any power tool, device, or equipment would disturb persons occupying sleeping quarters in any dwelling hotel, apartment, or other place of residence, between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, and between 6 P.M. and 8 A.M. on Saturday. All such activities are also prohibited on Sundays and all federal holidays.

Section 112.05 of the LAMC prohibits the operation of any powered equipment or powered hand tools that exceed the following noise limits at a distance of 50 feet between the hours of 7:00 A.M. and 10:00 P.M:

- 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

- 75 dBA for powered equipment of 20 horsepower or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools; or

- 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

However, the noise limitations above would not apply where compliance is deemed to be technically infeasible, which means that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques during the operation of the equipment.

(b) City of Los Angeles General Plan Noise Element

The California Government Code Section 65302(g) requires that a noise element be included in the General Plan of each county and city in the state. The Noise Element of the City of Los Angeles General Plan is intended to identify sources of noise and provide objectives and policies that ensure that noise from various sources does not create an unacceptable noise environment. Overall, the City's Noise Element describes the noise environment (including noise sources) in the City, addresses noise mitigation regulations, strategies, and programs and delineates federal, State, and City jurisdiction relative to rail, automotive, aircraft, and nuisance noise. It is a tool that City planners use to achieve and maintain compatible land uses with environmental noise levels.

The City's noise standards are correlated with land use zoning classifications in order to maintain identified ambient noise levels and to limit, mitigate, or eliminate intrusive noise that exceeds the ambient noise levels within a specified zone. Table IV.I-8 on page IV.I-14 lists the noise/land use compatibility guidelines for land uses within the City of Los Angeles.

In accordance with the Noise Element of the City of Los Angeles General Plan, a noise exposure of up to 60 dB CNEL is considered to be the most desirable target for the exterior of noise-sensitive land uses, or sensitive receptors, such as homes, schools, churches, libraries, etc. It is also recognized that such a level may not always be possible in areas of substantial traffic noise intrusion. Exposures up to 70 dB CNEL for noise-sensitive uses are considered conditionally acceptable if all measures to reduce such exposure have been taken. Noise levels above 70 dB CNEL are normally unacceptable for sensitive receptors except in unusual circumstances.

d. Existing Ambient Daytime Noise Levels

The Project Site is located in the Hollywood Community Plan Area of the City of Los Angeles and is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the 134 Freeway on the north, Griffith Park on the south and east, adjacent undeveloped property owned by Forest Lawn to the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement Foundation to the north and northeast. The Project Site is buffered from residential and commercial uses, and many of the property's uses are not visible from off-site, due to the topography of this area.

The primary sources of noise at and around the Project Site are associated with traffic along State Route 134 and Forest Lawn Drive. Additional secondary sources of noise include construction equipment (tractors and backhoes), and pedestrian and vehicular activity associated with cemetery operations within the Memorial-Park and the adjacent Mount Sinai Memorial Park.

Table IV.I-8
Guidelines for Noise Compatible Land Uses - Community Noise Equivalent Level (CNEL)

Land Use	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	Above 70
Multi-Family Homes	50 – 65	60 – 70	70 – 75	Above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	Above 80
Transient Lodging - Motels, Hotels	50 – 65	60 – 70	70 – 80	Above 80
Auditoriums, Concert Halls, Amphitheaters	—	50 – 70	—	Above 65
Sports Arena, Outdoor Spectator Sports	—	50 – 75	—	Above 70
Playgrounds, Neighborhood Parks	50 – 70	—	67 – 75	Above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 75	—	70 – 80	Above 80
Office Buildings, Business and Professional Commercial	50 – 70	67 – 77	Above 75	—
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	Above 75	—

[a] *Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.*

[b] *Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.*

[c] *Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.*

[d] *Clearly Unacceptable: New construction or development should generally not be undertaken.*

Source: Office of Noise Control, California Department of Health Services (DHS), included in the Los Angeles CEQA Thresholds Guide, Section I.2, 2006.

To establish baseline noise conditions at and within the vicinity of the Project Site, existing daytime noise levels were documented by taking noise measurements at five selected off-site locations (i.e., "receptor/monitoring locations"), as identified in Figure IV.I-1 on page IV.I-15 (see Appendix H to this Draft EIR for noise level measurement data). The off-site noise receptors range from within the Project Site near the boundary of the Mount Sinai Memorial Park to approximately 3,600 feet from the nearest Project-related construction areas, and represent the nearby residential, cemetery (Mount Sinai Memorial Park), and public park (Griffith Park) uses. As described in Table IV.I-9 on page IV.I-16, measurement receptor location 1 represents the ambient noise condition within the Project Site and the adjacent Mount Sinai Memorial Park. Mount Sinai is not specifically considered a noise sensitive receptor by the *City of Los Angeles CEQA Thresholds Guide*.



Source: Google Earth Pro and Matrix Environmental, 2010.

matrix environmental

Figure IV.I-1
Noise Monitoring and
Sensitive Receptor Location Map

Table IV.I-9
Existing Daytime Ambient Noise Levels

Noise Measurement Receptor Location	Approximate Distance to Project Nearest Construction Site boundary line,[a] feet	Measurement Date / Time	Measured Ambient Noise Levels,[b] dBA (L_{eq})	Primary Noise Sources
1 - Memorial Drive within Forest Lawn Memorial-Park, near the Mount Sinai Memorial Park [c]	750	4/24/2008, 2:42 – 2:57 p.m.	57.0	Several tractors and backhoes, subtle construction noise from Mount Sinai (cement truck and small crane)
2 - Look-out point on Mount Hollywood Drive (Griffith Park)	200	5/4/2010, 2:00 p.m. to 10:00 p.m. 5/5/2010, 7:00 a.m. to 11:00 a.m.	48.6 – 53.0 50.9 – 55.6	Distant traffic (SR-134 Freeway), and Forest Lawn operation (tractor equipment).
3 - Single-Family Residence at the intersection of W. Valleyheart Drive and Morningside Drive.	3,750	5/4/10, 9:31 – 9:36 a.m. 5/4/10, 10:55 – 11:10 a.m. 5/4/10, 3:28 – 3:43 p.m.	60.3 61.8 63.5	Traffic noise from SR-134 Freeway
4 - Single-Family Residence along W. Valleyheart Drive just South of Fairview Street	400	5/4/10, 10:01 – 10:16 a.m. 5/4/10, 11:21 – 11:36 a.m. 5/4/10, 3:02 – 3:17 p.m.	57.6 56.8 56.8	Traffic noise from Forest Lawn Drive
5 - Mount Lee Drive overlooking the Project Site (Griffith Park)	1,550	5/4/2010, 2:00 p.m. to 10:00 p.m. 5/5/2010, 7:00 a.m. to 11:00 a.m.	47.8 – 54.6 49.2 – 56.9	Distant traffic (SR-134 Freeway), Forest Lawn operation (tractor equipment), and occasional helicopter flyovers.

[a] *Refer to Figure IV.I-1 for the locations of these receptors.*

Source: AES, 2010.

However, for informational purposes, this location was evaluated in this section of the Draft EIR. Receptor locations 2 and 5 represent ambient noise within nearby walking trails within Griffith Park. Measurement locations 3 and 4 are representative of the off-site sensitive residential receptors that are closest to the Project's future construction areas across from Forest Lawn Drive. Refer to Table IV.I-9 on page IV.I-16 for the specific distances of the sensitive receptors to the nearest proposed construction activity.

Existing daytime noise levels at the locations displayed in Figure IV.I-1 were measured on April 24, 2008, May 4, 2010 and May 5, 2010 to obtain the ambient noise levels in the vicinity of the Project Site. The 15-minute average noise levels measured at each of these locations are identified and discussed in Table IV.I-9.

e. Existing Groundborne Vibration Levels

Aside from seismic events, the greatest regular sources of groundborne vibration in the vicinity of the Project Site are construction and earthwork activities associated with the cemetery operations on the Project Site and the adjacent Mount Sinai Memorial Park. Roadway traffic within the Project Site and the associated movement of soil for grave preparation also are existing vibration sources on site. This type of activity can result in vibration levels of approximately 86 vibration decibels (VdB) at distances of 50 feet from the source point of the equipment and truck activity. Additionally, trucks typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks travel on rough roads or pass over bumps in the road.

3. Environmental Impacts

a. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to noise. These questions are as follows:

Would the project result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generate excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project;

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

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

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

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* includes specific thresholds for determining whether noise impacts associated with construction and operation of a project would be significant. These thresholds are included below.

(1) Construction Noise

Based upon the criteria established in the *City of Los Angeles CEQA Thresholds Guide (2006)*, a project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;

- Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or

- Construction activities would exceed the ambient noise level by 5dBA at a noise sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.

(2) Construction Equipment Groundborne Vibration

Although not specified in the *City of Los Angeles CEQA Thresholds Guide (2006)*, a project would typically have a significant impact if project construction activities would generate and expose persons to excessive groundborne vibration or groundborne noise levels. The City of Los Angeles has not adopted any thresholds for groundborne vibration impacts. Groundborne vibration related to human annoyance is generally related to root mean square (rms) velocity levels expressed in VdB. In addition, a major concern with regard to construction vibration is building damage. Consequently, construction vibration is generally assessed in terms of peak particle velocity (PPV). Therefore, this analysis employs the Federal Transit Administration (FTA) vibration criteria for structural damage

and human annoyance included in Tables IV.I-2 and IV.I-3 above. As discussed in Table IV.I-3, FTA's structural damage criteria are specific to building types. These criteria range from 0.12 inch per second for buildings extremely susceptible to vibration damage to 0.50 inch per second for structures or buildings constructed of reinforced-concrete, steel, or timber. In addition, as described in Table IV.I-2, the FTA has also established human annoyance thresholds for various building types and duration. As indicated therein, the human annoyance threshold for various uses ranges from 65 to 83 VdB. A human annoyance threshold of 72 VdB is specifically provided at residences and buildings where people normally sleep and where vibration producing events (construction equipment operation) may be frequent on a given day.

(3) Operational Noise

The thresholds for project operation are based on criteria set forth in the *City of Los Angeles CEQA Thresholds Guide* and the City's Noise Ordinance, with the most restrictive provisions of the two applied. A project would have a significant impact on noise levels from project operations if:

- The project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (see Table IV.I-8 on page IV.I-14), or by 5 dBA in CNEL within the "normally acceptable" or "conditionally acceptable" category;

- Project-related operational (i.e., non-roadway) noise sources such as outdoor building mechanical/electrical equipment increase ambient noise level (L_{eq}) by 5 dBA, thus causing a violation of the City Noise Ordinance.

(4) Operational Groundborne Vibration

Although not specified in the *City of Los Angeles CEQA Thresholds Guide (2006)*, a project would typically have a significant impact if project operation activities would generate and expose persons to excessive groundborne vibration or groundborne noise levels. The City of Los Angeles has not adopted any thresholds for operational groundborne vibration impacts. Therefore, this analysis uses the FTA's human annoyance criteria for vibration included in Table IV.I-2 on page IV.I-8, which include a threshold of 72 VdB at residences and buildings where people normally sleep and where vibration producing events (construction equipment operation) may be frequent on a given day.

(5) Noise and Vibration Associated with Blasting Activities

The *City of Los Angeles CEQA Thresholds Guide (2006)* does not provide a significance threshold for blasting-induced noise and vibration. Therefore, significance

thresholds for noise and vibration impacts due to blasting have been established for this analysis based on review of the noise standards and guidelines from the USBM, OSM, and Caltrans, all of which are discussed in the above section. To provide a conservative approach, the significance thresholds have been established using the lower limits from USBM, OSM and/or Caltrans. For example, the 0.5 inch/second limit from USBM, which is lower than the 1.00 inch/second limit from OSM (for structures within 301 and 5,000 feet of the blast site), is used as significance threshold for vibration building damage. These significance thresholds are as follows:

(a) Noise

With regard to noise from construction-related blasting activities, impacts would be significant if the project would exceed either of the following:

- 120 dB for human annoyance, or
- 129 dB with regard to building damage.

(b) Vibration

With regard to vibration from construction-related blasting activities, impacts would be significant if the project would exceed either of the following:

- 0.25 inch/second PPV for human annoyance, or
- 0.50 inch/second PPV for building damage.

b. Project Design Features

The proposed Project would incorporate Project Design Features (PDFs) that may serve to reduce impacts associated with the Project and are considered in the analysis of the proposed Project's potential impacts. Project design features relative to noise are as follows:

PDF I-1 – Construction Blasting Features: Blasting activities at the East Area will not occur within 600 feet of receptor location 2. In addition, blasting activities within the East Area will be conducted in accordance with Table IV.I-10 on page IV.I-21, which provides the maximum charge weights by distance from receptor location 2.

Table IV.I-10
Maximum Charge Weights and Distances for Controlled Blasting within East Area

Distance from Receptor Location 2 (Lookout point on Mount Hollywood Drive Trail)	Maximum Charge Weight/Delay,[a] lbs
600	65
700	90
800	120
960	170

[a] *The charge weights were estimated assuming the charges are highly confined, per Caltrans' calculation procedures. That is, a K factor of 0.78 and 242 were used for the airblast and groundborne vibration calculations, respectively. This is a conservative assumption, as highly confined charges would result in higher groundborne vibration levels.*

Source: AES, 2010.

c. Project Impacts

The Project would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non-floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. It is estimated that over a 15-year construction period, approximately 2.7 million cubic yards of earth would be graded. Net export during grading would be approximately 713,000 cubic yards. In addition, up to 400,000 cubic yards of dirt would be exported in connection with grave preparation from 2011 to 2050. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. The sale of interment sites is also expected to occur over an extended period of time, beyond the year 2050.

Construction activities for the Project would include site preparation and grading. In addition, the placement of utilities and other infrastructure, placement of foundations for structures, removal of existing structures, and fabrication of new structures would occur at various locations within the Project Site. Construction activities would require the use of heavy trucks, excavating and grading equipment, and other mobile and stationary construction equipment.

Construction of structures such as an administration addition, chapel, columbarium, crypts and mausoleums may occur intermittently throughout the construction process. Therefore, the construction noise analysis includes grading, stockpiling activities, off-site soil export, and building construction. The Project's grading plan proposes three grading areas referred to as the Central, East, and West Areas that would occur within three

phases. In addition, Project construction occasionally would utilize controlled blasting in order to loosen the harder (rock) deposits within the excavation areas. Controlled blasting would be performed using ammonium nitrate and fuel oil (ANFO) used as the explosive material.[13]

(1) Project Generated Noise

As indicated above, the Project would require the use of heavy equipment for demolition, site grading and excavation, soil hauling, rock blasting and crushing, paving, and building fabrication during both the initial construction period, and through the long-term implementation of the Project through the year 2050 and beyond. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity throughout the east, central, and western phasing areas on the Project Site. The haul routes that would be used by haul and delivery trucks during construction and operation would access the Project Site from Forest Lawn Drive and also access the SR-134 Freeway directly from Forest Lawn Drive. The haul route would not include use of the westernmost entrance to the Project Site along Forest Lawn Drive.

The U.S. EPA has compiled data regarding the noise generating characteristics of typical construction activities. These data are presented in Table IV.I-11 on page IV.I-23. As indicated therein, the grading and excavation stage would generate construction noise levels of approximately 86 dBA (L_{eq}). Construction of building structures would generate noise levels that would range from approximately 77 dBA (L_{eq}) during the foundation stage to approximately 83 dBA (L_{eq}) during the structural stage. In addition, during the finishing stage, noise levels of approximately 86 dBA (L_{eq}) would be generated. Since the majority of the Project-related construction would involve site grading, the maximum reference noise level of 86 dBA (L_{eq}) at 50 feet distance was used to provide a conservative analysis of Project impacts. The construction noise levels were calculated for the receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance. With this attenuation rate, noise levels would diminish rapidly with distance from the construction site. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would be reduced to 78 dBA L_{eq} at 100 feet from the source to the receptor, and would be reduced by another 6 dBA L_{eq} to 72 dBA L_{eq} at 200 feet from the source to the receptor.

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[13] *A substantially similar explosive material may be used instead of ANFO if it does not pose a greater risk to the environment or human health.*

Table IV.I-11
Typical Outdoor Construction Noise Levels

Construction Phase	Noise Levels at 50 Feet with Mufflers (dBA L_{eq})	Noise Levels at 60 Feet with Mufflers (dBA L_{eq})	Noise Levels at 100 Feet with Mufflers (dBA L_{eq})	Noise Levels at 200 Feet with Mufflers (dBA L_{eq})
Ground Clearing	82	80	76	70
Excavation, Grading	86	84	80	74
Foundations	77	75	71	65
Structural	83	81	77	71
Finishing	86	84	80	74

Source: U.S. EPA, 1971 included in the Los Angeles CEQA Thresholds Guide, Exhibit I.1-2, 2006.

As noted in Section II, Project Description, the Project would include various phasing and schedules associated with construction and the long-term implementation of the Project. The West, Central, and East Areas would all experience construction related activity with various degrees of intensities, and in some cases, overlap of activities would occur in the phases.

Table IV.I-12 on page IV.I-24 provides the calculated construction-related noise levels at the five off-site receptors locations in the vicinity of the Project Site. As described in detail above, these receptors represent existing land uses (i.e., residential, park and cemetery) nearest to the Project's construction areas. Receptors that are located at a greater distance would experience lower construction-related noise levels due to additional sound attenuation associated with distance and intervening buildings structures. As previously discussed, receptor location 1 is not specifically considered a noise-sensitive receptor by the *City of Los Angeles CEQA Thresholds Guide*. However, a noise analysis was performed for informational purposes to determine the estimated construction-related noise levels at this receptor. As indicated in Table IV.I-12, the estimated Project-related construction noise levels at receptor location 1 would range from approximately 53.6 dBA to 62.5 dBA. Thus, construction noise associated with the Project would increase noise levels at this location by up to 5.5 dBA when construction activities occur at the nearest possible location to this receptor.

The highest noise levels at receptor locations 2 and 5, which represent the nearby trails in Griffith Park, would be up to approximately 74 and 56.2 dBA, respectively. These Project-related noise levels would result in an increase in ambient noise levels of up to 25.4 and 8.4, dBA, at receptor locations 2 and 5, respectively, when construction activities occur at the nearest possible location to the receptor and based on the lowest measured existing

Table IV.I-12
Estimated Construction Equipment Noise Levels at Representative Off-Site Locations

Receptor Location[a]	Approx. Distance to Construction Areas, [a] (feet)			Estimated Construction Noise Levels, (dBA L_{eq})			Lowest Measured Existing Ambient Noise Levels (dBA L_{eq})	Significance Threshold,[b] (dBA L_{eq})
	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area		
1 - Mount Sinai Memorial Park	860	750	2,075	61.3	62.5	53.6	57	N/A
2 - Look-out point on Mount Hollywood Drive (Griffith Park)	900	200	4,525	60.9	74.0	46.9	48.6	53.6
3 - Single-Family Residences North of 134 Freeway	3,750	4,050	4,325	48.5	47.8	47.3	60.3	65.3
4 - Single-Family Residences West of the Project Site	1,100[c]	1,100[c]	400	59.2	59.2	67.9	56.8	61.8
5 - Mount Lee Drive overlooking the Project Site (Griffith Park)	1,550	2,700	3,900	56.2	51.4	48.2	47.8	52.8

[a] *Estimated using Google Earth Map.*

[b] *Based on the lowest measured daytime ambient noise levels plus 5 dBA. Receptor location 1 is not considered noise sensitive use per the City CEQA Thresholds Guide and analysis of noise impacts at this location is included for informational purposes only.*

[c] *The Central Area and the West Area are approximately 3,100 feet and 5,250 feet from receptor location 4, respectively. However, the 1,100 foot distance between the proposed stockpile area within the West Area to receptor location 4 is used to provide a conservative analysis.*

Source: AES, 2010.

ambient noise level. However, unlike other areas within Griffith Park, these trails within the park are used by visitors on a transitory basis. Thus, any impacts would be short-term and limited to the few moments a person would require to pass by this portion of the Project Site under construction. Thus, these short-term noise impacts on persons that utilize these trails would not be significant.

As shown in Table IV.I-12 above, construction related noise levels at receptor location 3 would range from approximately 47.3 dBA to 48.5 dBA. These noise levels would be well below the significance threshold of 65.3 dBA established for this receptor location. Finally, at receptor location 4, the construction-related noise levels would range from approximately 59.2 dBA to 67.9 dBA and thus would exceed the significance threshold by up to 6.1 dBA when construction equipment is operating near the northwestern edge of the project site (approximately 400 feet to receptor location R4) during Phase 3 construction. The majority of the construction activities during Phase 3, however, would occur a minimum of 800 feet from receptor location 4. At a distance of 800 feet, the construction noise level would be reduced by an additional minimum 6 dBA (due to distance loss alone), which would reduce the noise impacts to just under 1 dBA. As discussed in detail below, with implementation of the proposed mitigation measures, construction noise levels would be reduced to a less than significant level.

In addition to on-site construction noise, haul and delivery trucks would access to the Project Site for export. As described above, the haul routes that would be used by haul and delivery trucks during construction and operation would access the Project Site from Forest Lawn Drive and also access the SR 134 Freeway directly from Forest Lawn Drive. The westernmost access to the Project Site from Forest Lawn Drive would not be used. There are no noise sensitive receptors (i.e., residential uses) along this haul route between the Project Site and the freeway. In addition, truck movements would generate noise levels of up to 76 dBA at 50 feet from the roadway (FTA 2006). This noise level would be temporary as the trucks pass by and would diminish rapidly as the trucks travel away from the receptors. In addition, the residential uses located further to the north of the Project Site are also shielded from the haul routes by the existing sound wall along the north side of the SR-134 freeway. Therefore, significant noise impacts would not result from off-site construction haul and delivery trucks.

In summary, with the implementation of Mitigation Measure I-1 through Mitigation Measure I-4 identified below, the proposed Project would result in less than significant noise impacts associated with construction activities. With regard to potential operational noise impacts, implementation of the Project would not change the various types of activities that occur within the site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the

Project Site. Thus, the resulting roadway noise levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational noise would not exceed the significance thresholds identified above. Thus, potential impacts associated with operational noise would be less than significant.

(2) Groundborne Vibration

(a) Human Annoyance at Nearby Uses

Construction activities anticipated to occur on site that have the potential to generate low levels of groundborne vibration include demolition, excavation, and soil hauling. Table IV.I-13 on page IV.I-27, identifies various vibration velocity levels for the types of construction equipment that would operate during the construction of the Project. Based on the information presented in Table IV.I-13, vibration levels could reach as high as approximately 87 VdB within 25 feet of the Project Site from the operation of construction equipment.

As discussed under Thresholds of Significance above, the FTA has established groundborne vibration thresholds for buildings where vibration would interfere with interior operations, residences and buildings where people normally sleep and institutional land uses with primarily daytime use. As shown in Table IV.I-3 on page IV.I-8, these thresholds range from 65 to 75 VdB.

Construction vibration impacts are based on the instantaneous peak vibration level produced by the highest vibration producing piece of equipment. Table IV.I-14 on page IV.I-27 provides estimated calculations of Project-related construction vibration levels at the off-site receptor locations. As indicated therein, the estimated vibration levels due to Project construction equipment at the receptors would range from 21.7 to 59.9 VdB.

Consequently, the vibration level that would be experienced by these receptors would not exceed FTA human annoyance vibration impact thresholds set forth in Table IV.I-2 on page IV.I-8., which range from 65 to 75 VdB. Furthermore, there are no structures present at receptor locations 2 and 5 and use of these locations by visitors is transitory and short-term. In addition, other nearby commercial uses, including the studio uses approximately 400 feet to the west would not experience vibration levels above 50.9 VdB, which would be well below the 65 VdB criteria for studio uses. Thus, potential construction-related vibration impacts associated with human annoyance would be less than significant.

With regard to potential operational vibration impacts associated with human annoyance, implementation of the Project would not change the various types of activities

Table IV.I-13
Vibration Source Levels for Construction Equipment

Construction Equipment	Approximate VdB at 25 feet	Approximate PPV (inch per second) at 25 feet
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Loaded Trucks	86	0.089
Jackhammer	79	0.076
Small Bulldozer	58	0.035

Source: FTA Transit Noise and Vibration Impact Assessment, Final Report, May 2006.

Table IV.I-14
Estimated Groundborne Vibration due to Construction Equipment at Off-Site Receptor Locations

Land Use (Receptor Locations)	Approx. Distance From Construction Activity Areas to the Receptor Locations (ft.)	Estimated Construction Vibration Levels (VdB) [a]	Estimated Construction Vibration Levels (PPV inch/second) [b]
1) Mount Sinai Memorial Park	750	42.7	0.0005
2) Look-out point on Mount Hollywood Drive	200	59.9	0.0039
3) Single-Family Residences North of 134 Freeway	3,750	21.7	0.0001
4) Single-Family Residences West of the Project Site	400	50.9	0.0014
5) Mount Lee Drive- overlooking the Project Site (Griffith Park)	1,550	33.2	0.0002

[a] *The vibration levels at the off-site uses are determined with the following equation from FTA, Transit Noise and Vibration Impact Assessment, Final Report: Lv(D)=Lv(25 ft) – 30log(D/25), where Lv = vibration level of equipment, D = distance from the equipment to the receiver, Lv(25 ft) = vibration level of equipment at 25 feet.*

[b] *PPV (D) = (Reference PPV at 25 feet) x (25 feet/ D)$^{1.5}$*

Source: AES, 2010.

that occur within the Project Site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, the resulting roadway vibration levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational vibration impacts

associated with human annoyance would not exceed the significance thresholds identified above. Thus, potential impacts would be less than significant.

(b) Structural Damage

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil in the vicinity of the construction site respond to these vibrations, with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels. Based on the information presented in Table 12-2 of the FTA's Transit Noise and Vibration Impacts Assessment, at a reference distance of approximately 25 feet from a large bulldozer the construction operation induced ground vibration could reach as high as 0.089 PPV (in/sec) or approximately 87 VdB.

The PPV vibration levels from Project construction equipment at off-site receptor locations are provided in Table IV.I-14 on page IV.I-27. As indicated therein, estimated Project PPV vibration levels associated with construction equipment would be well below the FTA's structural damage threshold vibration impact threshold of 0.12 inch-per-second PPV, assuming all structures are deemed "fragile," which is a conservative assumption. Accordingly, vibration impacts on adjacent structures resulting from construction equipment would be less than significant.

With regard to potential operational vibration impacts associated with building damage, implementation of the Project would not change the various types of activities that occur within the Project Site. In addition, as stated in Section IV.J., Traffic and Circulation, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, the resulting roadway vibration levels would therefore be unchanged as a result of Project implementation. Accordingly, long-term operational vibration impacts associated with building damage would not exceed the significance thresholds identified above. Thus, potential impacts would be less than significant.

(3) Construction Blasting Impacts

In addition to the conventional excavation process that requires using heavy earth moving equipment, controlled blasting would be required in areas of non-rippable rock. Blasting utilizes explosives to break the rock formation. When a blast is detonated, part of the energy is consumed in breaking up and moving the rock. The remaining energy is dissipated in the form of seismic waves expanding rapidly outward from the blast area,

either through the ground (as vibrations) or through the air (referred to as air overpressure or an airblast).[14] The vibration and airblast generated by blasting are typically of short-duration (i.e., less than a few seconds). An illustration of the areas within the site where controlled blasting may occur is provided in Figure IV.I-2 on page IV.I-30. It is anticipated that there would be one controlled blasting event per day for approximately 50 days during proposed construction.

The airblast levels were calculated based on procedures provided by Caltrans and using specific data from prior blasting activities conducted by the Applicant.[15] Based on this data, charge weights of 3.5 to 165 pounds per delay have previously been used. The amount of charge weight ultimately used generally depends on the rock characteristics and varies from site to site. Thus, to provide a conservative analysis, a charge weight of 165 pounds per delay was used for the noise and vibration analysis associated with controlled blasting activities, with the exception of blasting within the East Area (Phase 2) near the receptor location 2, where a maximum charge weight of 65 pounds per delay would be used at a distance of 600 feet from the receptor with charge weights increasing based on distance from the receptor per Project Design Feature PDF I-1.

Table IV.I-15 on page IV.I-31 provides the estimated airblast levels (peak linear sound level in dB) at the five off-site receptor locations. As indicated in Table IV.I-15, the estimated airblast levels at all off-site receptor locations would be below both the human annoyance and building damage significance thresholds for all three construction phases. Thus, potential airblast impacts would be less than significant.

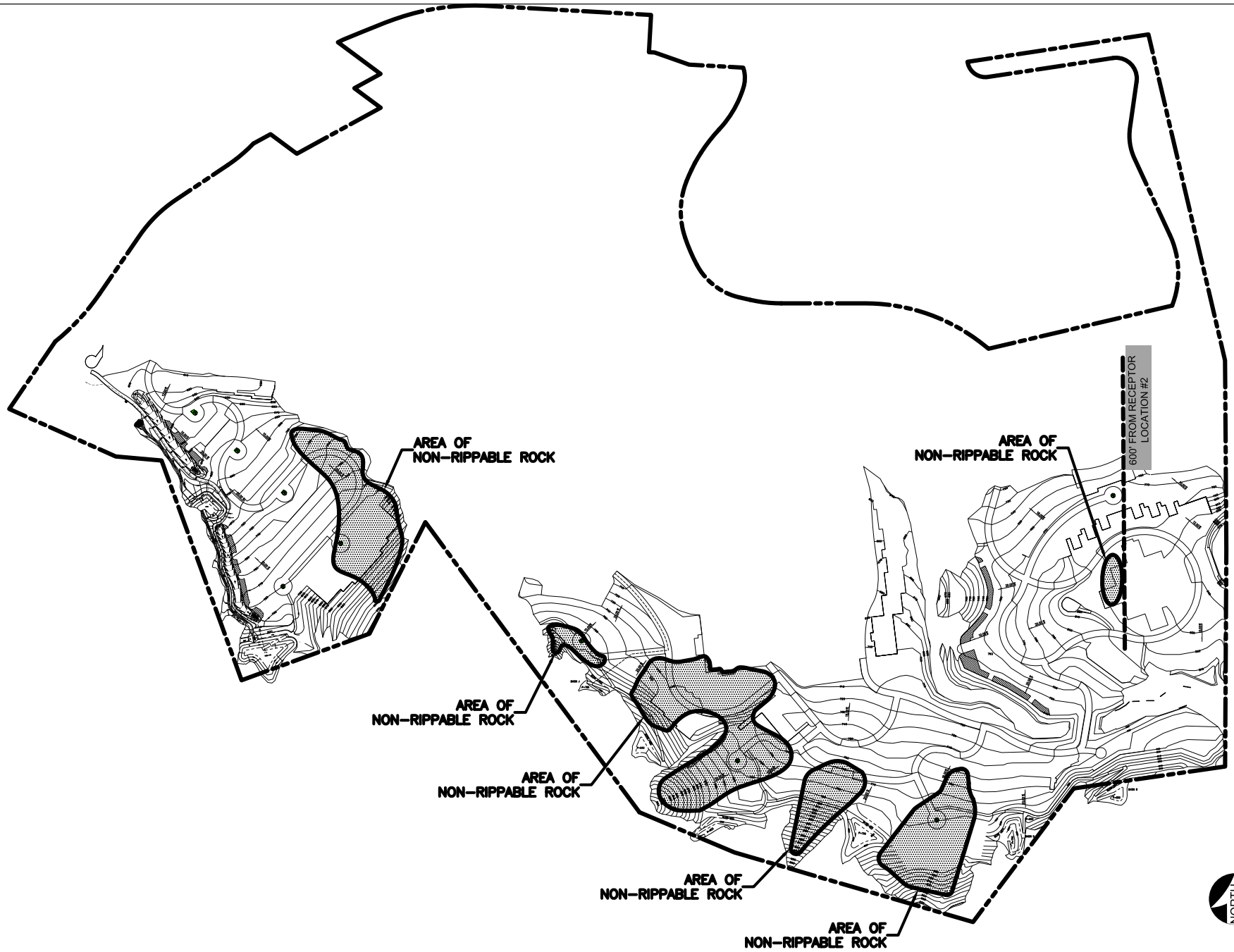
The blast-induced ground vibration levels were calculated using Caltrans' published vibration prediction procedure, which is based on blasting charge weights and the lateral distance to the affected receptors.[16] Similar to the air overpressure analysis, a maximum charge weight of 165 pounds per delay was used for the vibration analysis to provide a conservative analysis, with the exception of controlled blasting at the East Area (Phase 2) near receptor location 2. As described above, a maximum charge weight of 65 pounds per delay was used to calculate the ground vibration levels from the controlled blasting at the East Area to receptor location 2. Furthermore, a vibration factor (i.e., K factor; see calculation sheets placed in Appendix H for detailed information) of 242, which represents

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[14] *Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, 2004.*

[15] *Caltrans, Transportation- and Construction-Induced Vibration Guidance Manual, Chapter 11, 2004.*

[16] *Ibid.*



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure IV.I-2
Possible Controlled Blasting Locations

Table IV.I-15
Estimated Airblast Levels Due to Blasting

Receptor Location[a]	Approx. Distance to Blasting Areas,[a] (feet)			Estimated Airblast Levels,[b] (dB)			Significance Threshold, (dB)	
	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area	Human Annoyance	Building Damage
1 - Mount Sinai Memorial Park	2,000	1,125	2,150	107 – 117	113 – 123	106 – 116	N/A[d]	129
2 - Look-out point on Mount Hollywood Drive (Griffith Park)	1,900	600[c]	4,550	108 – 118	116[c]	99 – 109	120	N/A[e]
3 - Single-Family Residences North of 134 Freeway	4,850	4,475	4,400	98 – 108	99 – 109	99 – 109	120	129
4 - Single-Family Residences West of the Project Site	3,400	5,875	1,625	102 – 112	96 – 106	109 - 119	120	129
5 - Mount Lee Drive overlooking the Project Site (Griffith Park)	1,650	3,450	4,025	109 - 119	101 - 112	100 - 110	120	N/A[e]

[a] *Estimated using Google Earth Map.*

[b] *Calculated using the upper and lower bounds K factor, to provide a range of anticipated levels. See calculation sheets provided in Appendix H for detailed technical information.*

[c] *The airblast level was calculated at a distance of 600 feet distance from the blast area, as the project related blasting construction would not occur at the distance less than 600 feet from the receptor location 2. However, the construction area at its nearest point is approximately 200 feet from the receptor location 2. In addition, airblast level at receptor location 2 was calculated using the lower K factor and a maximum charge weight of 65 pounds per delay at the East Area (Phase 2), per Project Design Features, PDF I-1, to meet the Project's significance threshold of 120 dB.*

[d] *Receptor location 1 is not considered a noise sensitive receptor, per City CEQA Thresholds Gridline.*

[e] *Not applicable as there are no buildings at this location.*

Source: AES, 2010.

the upper bound of the calculation (resulting in a higher level) was also conservatively used to account for various variables in the blast design and site-specific geology. Table IV.I-16 on page IV.I-33 presents the estimated ground vibration levels due to controlled blasting at the nearby receptor locations. As indicated in Table IV.I-16, the estimated ground vibration generated by construction-related blasting would be well below both the human annoyance and building damage threshold at all off-site receptor locations. Thus, potential vibration impacts associated with blasting would be less than significant.

4. Cumulative Impacts

Future construction in the vicinity of the Project Site is not expected to result in a cumulatively considerable impact in terms of substantial temporary or periodic increases in ambient noise levels. Noise impacts are localized in nature and decrease substantially with distance. As shown in Figure III-1 in Section III, Environmental Setting, related projects in the immediate site vicinity include two City infrastructure projects proposed to the north of the Project Site and the Griffith Park Master Plan that is intended to provide for the ongoing maintenance and improvements within Griffith Park to the south and east of the Project Site. Based on the estimated timeframe of construction for the Project, it is possible that that these related projects could have the potential to affect the same surrounding uses as does the Project. However, as indicated above, no Project construction activities would occur in close proximity to occupied residences, which are located at least 800 feet away, on the other side of the Los Angeles River Flood Control Channel in Burbank. In addition, Mitigation Measure I-1 through Mitigation Measure I-4 have been proposed to reduce Project-related noise impacts from construction activities to less than significant levels. In addition, as indicated above, Project-related haul trucks would not utilize the westernmost entrance to the Project Site. Thus, Project-related haul trucks would not pass by nearby residential areas and no cumulative impacts associated with the proposed haul route would occur. Based on the above, the contribution of the Project to potential cumulative construction impacts would not be cumulatively considerable.

As described above, implementation of the Project would not change the various types of activities that occur within the Project Site. In addition, the Project would not generate a substantial increase in daily trips to the Project Site. Thus, operation of the Project would not generate a substantial increase in noise and vibration levels. In addition, due to their distance from the Project Site and the types of uses proposed, the related projects are not anticipated to generate a substantial increase in noise levels within the vicinity of the Project Site. Accordingly, long-term operational noise and vibration impacts would not be cumulatively considerable.

Table IV.I-16
Estimated Ground-Borne Vibration Levels Due to Blasting

Receptor Location[a]	Minimum Distance to Construction Activity Areas (ft.)			Estimated Ground-Borne Vibration Levels (PPV)[b]			Significance Threshold, PPV	
	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area	Phase 1 - Central Area	Phase 2 - East Area	Phase 3 - West Area	Human Annoyance	Building Damage
1 - Mount Sinai Memorial Park	2000	1125	2150	0.075	0.189	0.067	N/A[c]	0.50
2 - Look-out point on Mount Hollywood Drive (Griffith Park)	1900	600[d]	4550	0.082	0.24[f]	0.020	0.25	N/A[e]
3 - Single-Family Residences North of 134 Freeway	4850	4475	4400	0.018	0.021	0.021	0.25	0.50
4 - Single-Family Residences West of the Project Site	3400	5875	1625	0.032	0.013	0.105	0.25	0.50
5 - Mount Lee Drive overlooking the Project Site (Griffith Park)	1650	3450	4025	0.102	0.031	0.025	0.25	N/A[e]

[a] *Estimated using Google Earth Map.*

[b] *Calculated based on the maximum assumed charge weight of 165 pounds per delay and the upper bound calculation method, to represent a conservative analysis.*

[c] *Receptor location 1 is not considered a noise sensitive receptor per the City CEQA Thresholds Guide.*

[d] *The vibration level was considered at a distance of 600 feet distance from the blast area as the project related blasting construction would not occur at a distance less than 600 feet from the receptor location 2. However, the construction area at its nearest point is approximately 200 feet from the receptor location 2.*

[e] *Not applicable as there are no buildings at this location.*

[f] *Estimated vibration level at receptor location 2 is based on a maximum charge weight of 65 pounds per delay at the East Area (Phase 2), per Project Design Features, PDF I-1, to meet the Project's significance threshold of 0.25 PPV.*

Source: AES, 2010.

5. Mitigation Measures

Mitigation Measure I-1 The Applicant shall ensure all construction equipment engines be properly tuned and muffled according to manufacturers' specifications.

Mitigation Measure I-2 The Applicant shall ensure noise construction activities whose specific location on the site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) would be conducted as far as possible from the nearest noise-sensitive land uses, and natural and/or manmade barriers (e.g., intervening construction trailers) shall be used to screen such activities from these land uses to the maximum extent possible.

Mitigation Measure I-3 The Applicant shall ensure an informational sign be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive noise levels. Any reasonable complaints shall be recorded and addressed by the Applicant.

Mitigation Measure I-4 During Phase 3 (West Area) construction, when construction activities occur within less than 1,000 feet of receptor location 4, a temporary noise barrier of a maximum height of 8 feet shall be placed at the boundary of the active construction areas facing receptor location 4. The noise barrier shall block the line-of-sight between the off-site receptor and the construction equipment and shall provide a minimum 7 dBA noise reduction at receptor location 4.

6. Level of Significance After Mitigation

With implementation of the mitigation measures provided above, construction-related noise impacts would be less than significant. As discussed above, construction-related vibration impacts would be less than significant and no mitigation measures would be required. In addition, operation of the Project would not result in any significant impacts associated with noise or vibration. Thus, no mitigation measures would be required.

IV. Environmental Impact Analysis

J. Traffic, Circulation and Parking

1. Introduction

This section summarizes the findings presented in the May 1, 2008 traffic memorandum entitled *Forest Lawn Memorial-Park - Hollywood Hills Master Plan and Trip Generation Assessment* (Trip Generation Assessment), prepared for the Project by Crain & Associates, the Project traffic consultant. This memorandum is included as Appendix I to this Draft EIR. Based on their review of the Project, Crain & Associates determined that the Project would generate negligible, if any, new trips, and as such, would not have the potential to result in a significant traffic impact pursuant to the City's thresholds of significance. Accordingly, a detailed traffic study for the Project is not warranted. The City of Los Angeles Department of Transportation (LADOT) has reviewed the memorandum and concurs that a detailed traffic study for the Project is not warranted. Since the Project would have a less than significant impact on traffic and would not require a detailed traffic study, an expanded analysis of potential traffic impacts in this Draft EIR is not required. Nonetheless, the following summary of Crain & Associates' findings is included in this Draft EIR for public information purposes and to provide documentation for the administrative record to support these findings. A copy of the Trip Generation Assessment, as well as correspondence with the LADOT, can be found as Appendix I to this Draft EIR.

Additionally, this section addresses potential Project impacts related to construction traffic, accessibility and site safety, and cumulative traffic effects. For a discussion of the Project's consistency with relevant land use plans and policies related to traffic and circulation, see Section IV.H, Land Use and Planning, of this Draft EIR.

2. Environmental Setting

a. Project Location

As described in Section II, Project Description, of this Draft EIR, the Project is located in the Hollywood Hills area of the City of Los Angeles at the existing Forest Lawn Memorial-Park - Hollywood Hills property. The Project Site comprises approximately 444 acres within the Hollywood Hills area of the City of Los Angeles and is bounded by Forest Lawn Drive, the Los Angeles River Flood Control Channel and the State Route (SR) 134 Freeway on the north, Griffith Park on the south and east, contiguous

undeveloped land owned by the Forest Lawn Memorial-Park Association to the west, and by Mount Sinai Memorial Park and the administrative offices of the Junior Achievement of Southern California Inc., to the north and northeast. The Project Site is buffered from residential and commercial uses, and many of the property's uses are not visible from off-site, due to the topography of this area. A Regional and Project Vicinity Map is provided in Figure II-1 in Section II, Project Description, of this Draft EIR.

b. Existing Street System

The existing street system in the Project area consists of a regional roadway system including freeways, principal and secondary arterials, and collector and local streets. The secondary highways, collectors, and selected local streets in the Project area offer sub-regional and local access and circulation opportunities. These facilities generally provide two to four travel lanes and allow parking on either side of the street. Typically, the speed limits range between 25 and 35 miles per hour, with the exception of 45 miles per hour on Forest Lawn Drive. A description of the regional access and local street system access offered by the various roadways is included below.

(1) Freeway System

Primary regional access to the Project area is provided by US 101, SR-134, and SR 170. The Project Site is approximately 2.5 miles east of the junction of the Hollywood Freeway, which runs generally southeast-northwest relative to the Project Site, and the Ventura Freeway, which runs east-west approximately one-tenth of a mile north of the Project Site. US 101 connects with Interstate (I) 405, which runs north-south approximately eight miles west of the Project Site. The Ventura Freeway connects with I-5, which runs southeast-northwest approximately two miles east of the Project Site, and with SR 2, which runs north-south approximately five miles east of the Project Site.

(2) Arterial Streets

The major arterials providing regional and sub-regional access to the Project area include Forest Lawn Drive, Zoo Drive, South Buena Vista Street, West Alameda Avenue, West Olive Avenue, and Barham Boulevard.

c. Existing Site Access

Forest Lawn Drive provides direct access to the Project Site. The main access into and out of the Project Site is located at Forest Lawn Drive and Memorial Drive. Three minor driveways, one west of the main entrance at Forest Lawn Drive near the westerly edge of the Project Site; one east of the main entrance at Forest Lawn Drive between

Memorial Park Drive and Mount Sinai Drive; and one east of Mount Sinai Memorial Park, are closed except for emergencies and maintenance activities.

d. Existing Traffic Volumes

Existing traffic levels at the Project Site are directly related to the number of daily interments occurring at the Forest Lawn Memorial-Park - Hollywood Hills. Forest Lawn - Hollywood Hills has been in operation for over 60 years and the number of interments that have occurred at this facility has been stable over the last decade. In addition, special events occur occasionally at the Project Site, including school programs and other community use of facilities; however, these events are limited in scale, infrequent, and are usually held during off-peak hours.

A review conducted of the interment activity at the Project Site over the last 13 years, i.e., January 1, 1997 through December 31, 2009, provided the following results showing the range of daily interments per month over the course of each year:

Range of Average Daily Interments on Monthly Basis (month with the lowest average daily interments – month with the highest average daily interments)			
1997:	10.2 - 14.2 per day	**2004**:	9.3 - 15.7 per day
1998:	9.7 - 16.3 per day	**2005**:	9.4 - 13.5 per day
1999:	9.1 - 12.6 per day	**2006**:	10.6 - 15.0 per day
2000:	10.7 - 16.8 per day	**2007**:	9.0 - 11.5 per day
2001:	10.0 - 12.9 per day	**2008**:	8.5 - 11.5 per day
2002:	10.5 - 13.8 per day	**2009**:	8.4 - 10.6 per day
2003:	9.9 - 12.8 per day/month		
Average Daily Interments by Year			
1997:	11.7	**2004**:	11.7
1998:	12.0	**2005**:	11.6
1999:	11.5	**2006**:	12.4
2000:	12.1	**2007**:	10.2
2001:	11.5	**2008**:	10.1
2002:	11.6	**2009**:	9.6
2003:	11.5		
Average Daily Interments, 1997 – 2009			
11.3			

As shown, while there have been monthly fluctuations in the amount of daily interments, which is typical of cemeteries, the daily average number of interments over the last 13 years has been approximately the same. It should be noted that the death rate in Los Angeles County has remained relatively unchanged for many years. However, even if the death rate in Los Angeles County were to increase, the daily and/or monthly amount of interments at the Forest Lawn Memorial Park - Hollywood Hills property would not increase due to existing logistical constraints at the facility (i.e., staffing and equipment needs, scheduling, and other logistical issues that affect the number of services that can be held per day).

To estimate the current level of trip generation at the Forest Lawn Memorial Park - Hollywood Hills property, manual peak-hour and machine 24-hour traffic counts were conducted for the main driveway, Memorial Drive, during the week of April 16 - 20, 2007. Historically, April has been a month representative of normal traffic activity for the Forest Lawn Memorial-Park – Hollywood Hills property. As noted above, Memorial Drive is the only access into and out of the Project Site, except for the minor driveways that are closed except for emergencies and other infrequent activities. These minor driveways were not used during the week of the traffic counts. By using the manual counts (April 16, 18, and 20) to calibrate and normalize the week-long machine counts, the existing average trip generation at the Project Site has been determined to be as follows:

- Approximately 2,990 trips per day.
- Approximately 109 trips (154 inbound and 46 outbound) during A.M. peak hour (between 7:00 and 10:00 A.M.).
- Approximately 259 trips (118 inbound and 283 outbound) during P.M. peak hour (between 3:00 and 6:00 P.M.).

The calibrated traffic volumes summary and the traffic count data sheets for Memorial Drive are included in Appendix I to this Draft EIR. In addition, Appendix I includes data sheets for machine 24-hour counts for Forest Lawn Drive east of Memorial Drive that were also conducted April 16 - 20, 2007, plus data sheets for machine 24-hour counts for Forest Lawn Drive at or near Mt. Sinai Drive that were conducted by others in 1999 and 2005. Mt. Sinai Drive is less than 0.7 mile east of Memorial Drive. As there are no intervening streets or significant driveways on Forest Lawn Drive, there should be no significant difference in traffic volumes on Forest Lawn Drive between Mt. Sinai Drive and Memorial Drive.

Comparing the 1999 and 2005 daily volumes with those from the April 16 - 20, 2007, counts, it can be seen that there has been essentially no increase in traffic on Forest Lawn Drive over the approximate 7.5-year period. The daily traffic volume on this segment has

remained stable, approximately 21,000 vehicles per day. Since Forest Lawn Drive is the only street directly accessing Memorial Drive, it can be reasonably deduced that traffic on Memorial Drive into and out of the Project Site also has not changed during the same period.

e. Regulatory Framework

(1) Los Angeles Municipal Code

With regard to construction traffic, Sections 41.40 and 112.03 of the Los Angeles Municipal Code (LAMC) limits construction activities to the hours from 7:00 A.M. to 9:00 P.M. on weekdays and from 8:00 A.M. to 6:00 P.M. on Saturdays. No construction is permitted on Sundays or national holidays.

(2) Good Neighbor Construction Practices

The Los Angeles Department of Building and Safety's "Good Neighbor Construction Practices" outline practices to reduce project construction impacts on surrounding communities. These practices include parking construction vehicles on-site to prevent congestion, using flag persons and warning signs during haul truck entry/exit from the construction site, avoiding street closures during peak traffic hours, properly filling concrete trucks during deliveries, eliminating unnecessary noise (e.g., music) during construction, cleaning construction debris from public rights-of-way, eliminating conflicts with City trash pick-up schedules/operations, and obtaining permits when storing building materials in the public right-of-way.

3. Environmental Impacts

a. Methodology

To determine the proposed Project's traffic impacts, the proposed Project's trip generation was calculated and then compared to LADOT standards to determine if a significant impact were to occur. As cemeteries are a unique land use, their trip generation characteristics are best determined on a case-by-case basis. The most authoritative and widely used reference source regarding trip generation is the handbook, Trip Generation 7th Edition, 2003, published by the Institute of Transportation Engineers (ITE). In December 2008, ITE published the handbook, *Trip Generation 8th Edition*. The trip generation rates for the cemetery land use in the 8th Edition of the handbook are identical to the trip generation rates for the cemetery land use in the 7th Edition of the same handbook. No additional or new trip generation information regarding the cemetery land use is provided in the 8th Edition. However, both sources contain very limited information

regarding the trip generation characteristics of cemeteries, and contain many inconsistencies that do not apply to the Project Site.

As a result, to estimate the current level of trip generation of the Forest Lawn Memorial-Park – Hollywood Hills property, manual peak-hour and machine 24-hour traffic counts were conducted of the main driveway, Memorial Drive, during the week of April 16 - 20, 2007. To calculate traffic generation over the Project's development period (2011 – 2050), a negligible growth rate of 1.0 percent over every five-year period was then applied to the resulting traffic counts. The resulting daily, A.M. peak hour and P.M. peak hour trips estimates for the proposed Project and traffic estimates along Forest Lawn Drive were then compared against standard LADOT methodology to determine whether an in-depth traffic analysis or any significant impacts would result from the proposed Project's estimated traffic generation.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to hazards and hazardous materials. These questions are as follows:

Would the project:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads and highways?

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

- Result in inadequate emergency access?

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

In the context of the remaining questions, the *City of Los Angeles CEQA Thresholds Guide* states that the determination of significance with regard to impacts associated with Traffic, shall be made on a case-by-case basis, considering the following factors:

(1) Intersection Capacity

Based upon the criteria established in the C*ity of Los Angeles CEQA Thresholds Guide*, a proposed project would normally have a significant impact on intersection capacity if the project traffic causes an increase in the volume to capacity (V/C) ratio on the intersection operating condition after the addition of project traffic of one of the following:

- V/C ratio increase ≥0.040 if final LOS is C
- V/C ratio increase ≥0.020 if final LOS is D
- V/C ratio increase ≥0.010 if final LOS is E or F

(2) Street Segment Capacity

Based upon the criteria established in the *City of Los Angeles CEQA Thresholds Guide*, a proposed project would normally have a significant street segment capacity impact if project traffic causes an increase in the V/C ratio on the street segment operating condition after the addition of project traffic equal to or greater than the following:

- V/C ratio increase ≥0.080 if final LOS is C
- V/C ratio increase ≥0.040 if final LOS is D
- V/C ratio increase ≥0.020 if final LOS is E or F

(3) Freeway Capacity

Based upon the criteria established in the C*ity of Los Angeles CEQA Thresholds Guide*, a project would normally have a significant freeway capacity impact if project traffic causes an increase in the demand to capacity (D/C) ratio on a freeway segment or freeway on- or off-ramp of two percent or more capacity (D/C increase >0.02), which causes or worsens LOS F conditions (D/C >1.00).

(4) Neighborhood Intrusion Impacts

Based upon the criteria established in the C*ity of Los Angeles CEQA Thresholds Guide*, a project would normally have a significant neighborhood intrusion impact if project traffic increases the average daily traffic (ADT) volume on a local residential street in an amount equal to or greater than the following:

- ADT increase ≥ 16% if final ADT <1,000
- ADT increase ≥ 12% if final ADT >1,000 and <2,000
- ADT increase ≥ 10% if final ADT >2,000 and <3,000
- ADT increase ≥ 8% if final ADT >3,000

(5) Project Access (Operational)

Based upon the criteria established in the C*ity of Los Angeles CEQA Thresholds Guide*, a project would normally have a significant project access impact if the intersection(s) nearest the primary site access is/are projected to operate at LOS E or F during the a.m. or p.m. peak hour, under cumulative plus project conditions.

(6) Parking

Based upon the criteria established in the C*ity of Los Angeles CEQA Thresholds Guide*, a project would normally have a significant impact on parking if the project provides less parking than needed as determined through an analysis of demand from the project.

c. Project Impacts

In connection with the proposed Project, approximately 22,500 square feet of new floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory), approximately 1,100,000 square feet of non–occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 additional interment sites would be added to the Project Site. Approximately 7,000 new interment spaces (built spaces) and additional ground spaces would also be constructed within existing developed areas of the Project Site. Approximately 16 acres would be improved as roadways and used for non-interment buildings. The Project is expected to be developed through 2050, with the sale of interment sites occurring through the year 2050 and beyond. Thus, the development and completion of the Project will be gradual over a 40-year period. Detailed descriptions of the proposed improvements, as well as proposed site plans, are provided in Section II of this Draft EIR.

(1) Construction Impacts

LADOT considers construction-related traffic effects as adverse but not significant impacts because such effects, while sometimes inconvenient, are intermittent and temporary in nature. Additionally, LADOT requires implementation of worksite traffic control plans to ensure that any construction-related effects are minimized to the greatest extent possible.

Project construction-related traffic would consist of construction equipment, including haul trucks, and construction employee vehicles. All construction equipment would be staged on-site, and all construction employees would park on-site. As described in Section II, Project Description, of this Draft EIR, the Project will include a request for a haul route permit to export approximately 713,000 cubic yards of soil from the Project The Project also includes a request for a second haul route permit for the export of approximately 400,000 cubic yards of soil from the Project Site in connection with grave preparation over the life of the Project (i.e., through 2050 and beyond).

All construction activities would be performed in accordance with all applicable state and federal laws and City Codes and policies with respect to building construction and activities, including the Department of Building and Safety's "Good Neighbor Construction Practices" as necessary and applicable to minimizing construction related impact on the surrounding community. These practices include parking construction vehicles on-site to prevent congestion, using flag persons and warning signs during haul truck entry/exit from the construction site, avoiding street closures during peak traffic hours, properly filling concrete trucks during deliveries, eliminating unnecessary noise (e.g., music) during construction, cleaning construction debris from public rights-of-way, eliminating conflicts with City trash pick-up schedules/operations, and obtaining permits when storing building materials in the public right-of-way. As provided in Sections 112.03 and 41.40 of the LAMC, the permissible hours of construction are 7:00 A.M. to 9:00 P.M., Monday through Friday, and between 8:00 A.M. and 6:00 P.M. on any Saturday or national holiday. No construction activities are permitted on Sundays. Project construction is expected to occur on an average of 22 active construction days per month.

Given the size and relative isolation of the Project Site, as well as the Project Site's proximity to the freeway, the combination of haul truck and employee traffic is not anticipated to cause any adverse impacts to intersection capacity, street segment capacity, freeway capacity, neighborhood intrusion, or parking during the construction period. While the sites receiving the removed soils have not been identified at this time, it is anticipated that all haul trucks would use the SR 134 Freeway and access the Project Site via the on- and off-ramps for Forest Lawn Drive. The haul route would not pass through a residential community and no schools are located along this route. Thus, construction related impacts to the surrounding land uses would be less-than significant. In addition, the proposed haul

routes would be subject to conditions as deemed necessary by the City, including LADOT, Police Department, and the Planning Department to further reduce construction related impacts. Therefore, construction-related traffic impacts would be less than significant, and mitigation is not required.

(2) Operational Impacts

(a) Intersection Capacity, Street Segment Capacity, Freeway Capacity, and Neighborhood Intrusion Impacts

As noted above, the daily average number of interments at the Project Site has remained approximately the same for the past 13 years. The number of visitors to cemeteries is directly correlated to the amount and rate of annual interments. The death rate in Los Angeles County has also remained relatively unchanged for many years. However, even if the death rate in Los Angeles County were to increase, the daily and/or monthly amount of interments at the Forest Lawn Memorial Park - Hollywood Hills property would not increase due to existing logistical constraints at the facility.

Available traffic count data indicates that the daily traffic volume on Forest Lawn Drive remained stable for the 7.5-year period ending in April 2007. Therefore, although the Project will provide approximately 200,000 additional interment sites, the level of daily interment activity is expected to continue to be stable over the life of the Project, as it has been for over the last 13 years. Furthermore, the new interment sites will be developed and utilized within the undeveloped areas of the Project Site over an extended period of time, from 2011 to 2050 and beyond, in order to meet the regional demand for new interment sites as the existing supply of interment space is depleted. Based on the stability in the number of interments that have occurred at the Forest Lawn Memorial-Park - Hollywood Hills property over the last decade, trip generation is expected to continue to be stable over the life of the Project. No additional growth in trip generation beyond current levels is anticipated. Accordingly, no increase in trip generation, including with the Project, is anticipated.

While no increase in trip generation would be expected to occur as a result of the Project for the reasons stated above, an analysis of potential trip generation employing appropriately conservative assumptions based on land use type is presented below to supplement this analysis.

(b) Project Traffic Generation

As cemeteries are a unique land use, their trip generation characteristics are best determined on a case-by-case basis. As discussed above, the most authoritative and widely used reference source regarding trip generation, and the source referenced in the

proposed Project's Trip Generation Assessment, is the handbook, *Trip Generation 7th Edition*, 2003, published by the Institute of Transportation Engineers (ITE). In December 2008, ITE published the handbook, *Trip Generation 8th Edition*. The trip generation rates for the cemetery land use in the 8th Edition of the handbook are identical to the trip generation rates for the cemetery land use in the 7th Edition of the same handbook. No additional or new trip generation information regarding the cemetery land use is provided in the 8th Edition. However, both editions have very limited information regarding the trip generation characteristics of cemeteries, as only five studies have been conducted by ITE for this use. The average size of the cemeteries in these studies is 108 acres, which is much smaller than the Forest Lawn Memorial-Park - Hollywood Hills. From the five studies, only daily trip generation rates are available for weekday, Saturday and Sunday. This source does have weekday, Saturday and Sunday peak-hour trip rates, but those rates are based on an even smaller sample size of one study. In addition, there is no description regarding the sites in the studies or any instruction as to the applicability of the trip rates, other than the cautionary note that the information should be used carefully due to the limited sample size.

Even if the ITE sample size of the trip generation studies were larger and more background information were provided, applying the ITE trip rates to an established cemetery such as Forest Lawn Memorial-Park - Hollywood Hills to estimate the new trips generated by the Project would be inappropriate and likely lead to inaccurate results. Such rates are better suited for entirely new cemetery sites for which trip generation estimates may be desired.

If any additional traffic were generated due to the Project, it would be negligible and very gradual. For purposes of a conservative analysis, it has been assumed that such growth might be as high as 1.0 percent over a five-year period. Applying this hypothetical increase to the existing Project Site trip generation every five years over the 40-year buildout of the Project from 2011 to 2050, the resulting additional Project trip generation would be as follows:

- Project Daily Trips: 2,990 trips x (40 years ÷ 5 years) x 1.0 percent = 239 trips.
- Project A.M. Peak Hour Trips : 109 trips x (40 years ÷ 5 years) x 1.0 percent = 9 trips.
- Project P.M. Peak Hour Trips: 259 trips x (40 years ÷ 5 years) x 1.0 percent = 21 trips.

Based on the C*ity of Los Angeles CEQA Thresholds Guide*, if a project generates less than 500 daily trips and less than 43 trips in the P.M. peak hour, there would be no significant impact on the street segment. The trip generation estimates for the Project are

minor and well below the City's criteria for triggering project traffic studies. It should also be noted that the Project Site's weekday peak trip generation generally occurs between the off-peak traffic hours of 10:00 A.M. and 3:00 P.M., and does not impact traffic during the typical commute hours when traffic volumes are greater. This pattern is expected to continue with the Project.

Due to ongoing grave preparation activities, soil export from the Project Site is a regular occurrence under existing operations. The Project would continue the cemetery use of the existing Project Site; as such, the Project includes a request for a second haul route permit for the export of approximately 400,000 cubic yards of soil from the Project Site to accommodate grave preparation over the life of the Project. This soil export would be spread out over at least a 40-year period (i.e., through 2050 and beyond). Furthermore, as discussed above, the level of daily interment activity is expected to continue to be stable over the life of the Project. Therefore, soil export due to grave preparation during Project operation would not be anticipated to generate a significant increase in truck traffic.

(c) Intersection Capacity

As stated above, a project would result in a significant impact if it does one of the following: increases the V/C ratio at an LOS C intersection by ≥0.040 or more; increases the V/C ratio at an a LOS D intersection by ≥0.020 or more; or increase the V/C ratio at an LOS E or F intersection by ≥ 0.010 or more. The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the V/C ratio at any of the intersections within the Project vicinity. Accordingly, impacts to intersection capacity would be less than significant, and mitigation is not required.

(d) Street Segment Capacity

As stated above, a project would result in a significant impact if it does one of the following: increases the V/C ratio on a LOS C street segment by ≥0.080 or more; increases the V/C ratio at an a LOS D street segment by ≥0.040 or more; or increase the V/C ratio at an LOS E or F street segment by ≥ 0.020 or more. The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the V/C ratio on any of the street segments in the Project vicinity. Accordingly, impacts to street segment capacity would be less than significant, and mitigation is not required.

(e) Freeway Capacity

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to cause an increase in the D/C ratio on any freeway segment or freeway on- or off-ramp of two percent or more capacity (D/C increase >0.02),

which causes or worsens LOS F conditions (D/C >1.00). Accordingly, impacts to freeway capacity would be less than significant, and mitigation is not required.

(f) Neighborhood Intrusion

The trip generation analysis indicates that Project traffic would be negligible and therefore would not be anticipated to increase the ADT volume on a local residential street in an amount equal to or greater than the following: ADT increase ≥ 16% if final ADT <1,000; ADT increase ≥12% if final ADT >1,000 and <2,000; ADT increase ≥10% if final ADT >2,000 and <3,000; or ADT increase ≥8% if final ADT >3,000. Accordingly, neighborhood intrusion impacts would be less than significant, and mitigation is not required.

(g) Project Site Access Impacts

The Project proposes to expand the current facilities and develop currently undeveloped areas of the property in order to provide approximately 200,000 additional interment sites. The Project is not proposing to add new driveways on the streets bounding the Project Site and therefore would not impact site access. Additionally, the Project would not alter the overall internal circulation scheme within the Project Site. Access to the Project Site, including emergency access, would not change under the Project as compared to existing conditions. As noted above, the Project is not expected to result in increased traffic, including at the primary site access location at Memorial Drive, and no off-site roadway improvements are proposed. Therefore, Project traffic would not be anticipated to cause the intersection nearest the primary site access to operate at LOS E or F during the A.M. or P.M. peak hour under cumulative plus project conditions, and impacts to Project Site access would be less than significant. Accordingly, mitigation is not required.

(h) Parking Impacts

There are approximately 600 parking spaces located on the Project Site within various surface parking lots. Approximately 200 surface parking spaces are located at the entrance of the Project Site surrounding the Administration/Flower/Mortuary Building and Chapel and storage buildings. Approximately 150 surface parking spaces are located immediately adjacent to the Hall of Liberty building with another 250 spaces located at the top of Ascension Road. In addition to the marked surface parking areas, additional parking is available throughout the Project Site along the private roadway network within the Project Site. As such, ample parking is available within the Project Site to meet parking demands. Buildout of the proposed Project would increase on-street surface parking areas along the new private roadways internal to the Project Site. Surface parking areas would also be developed to accommodate the demands of new structures. As all of the Project's parking demands can be met on site, parking would not spill over onto adjacent roadways and thus would not have the potential to adversely affect neighboring properties.

Therefore, the Project would not provide less parking than needed, and parking impacts would be less than significant. Accordingly, mitigation is not required.

4. Cumulative Impacts

Implementation of the Project in combination with the related development projects in the area would increase the amount of traffic in the region. As discussed above, the Project would generate negligible, if any, new trips. Because the Project's incremental contribution to the cumulative impact on traffic would be very minor (specifically, less than half of the 500-daily-trip threshold that triggers an expanded traffic analysis pursuant to the C*ity of Los Angeles CEQA Thresholds Guide*), it would not result in a significant cumulative effect. In addition, other development projects would be evaluated on a case-by-case basis and mitigation measures would be implemented individually in coordination with the City. The Project would not result in a significant impact related to accessibility, including emergency access. With respect to each of these areas, the design of each related development project would be evaluated individually in coordination with City, the Fire Department, and the Police Department to minimize any potential impacts. Overall the Project's cumulative traffic and circulation impacts would be less than significant.

5. Mitigation Measures

As summarized in this Section, the Project would not have the potential to result in significant traffic and circulation impacts, and as such, does not require further analysis in a traffic study. Therefore, mitigation measures are not required.

6. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in traffic to a point where the existing roadway infrastructure would be adversely affected based on LADOT standards. As such, Project traffic, circulation, and parking impacts would be less than significant.

IV. Environmental Impact Analysis

K.1 Public Utilities - Wastewater

This Section describes the wastewater system (including conveyance and treatment facilities) that currently serves the Project Site and surrounding area and assesses potential impacts associated with the Project on this system.

1. Environmental Setting

a. Wastewater System Facilities

The City of Los Angeles Department of Public Works, Bureau of Sanitation Division, (the "Bureau of Sanitation") provides sewer conveyance infrastructure and wastewater treatment services to the Project area. The Bureau of Sanitation operates four treatment and water reclamation plants: the Hyperion Treatment Plant (HTP), Donald C. Tillman Water Reclamation Plant (TWRP), the Terminal Island Water Reclamation Plant, and the Los Angeles-Glendale Water Reclamation Plant (LAGWRP).[1]

The wastewater treatment system of the City is divided into two major service areas: the Hyperion Service Area (HSA) and the Terminal Island Service Area (TISA). The HSA is served by the HTP, the TWRP, and the LAGWRP. The TISA is served by the Terminal Island Treatment Plant. The Project Site is located within the service area of the HSA. The HSA encompasses approximately 328,000 acres, or approximately 515 square miles, of the greater Los Angeles area and serves approximately four million people. The HSA also serves 53,000 acres outside the jurisdiction of the City on a contract basis.

The Project Site is primarily served by the HTP. The HTP is located southwest of the Los Angeles International Airport in Playa del Rey. In 1998, the HTP was upgraded to provide full secondary treatment for all wastewater based on an average dry weather flow of 450 million gallons per day. The HTP currently processes average wastewater flows of approximately 362 million gallons per day, resulting in a remaining capacity of

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[1] *City of Los Angeles Department of Public Works, Bureau of Sanitation. Wastewater: About Wastewater, Facts and Figures. Available at: http://www.ci.la.ca.us/SAN/wastewater/factsfigures.htm. Accessed September 13, 2010.*

approximately 88 million gallons per day.[2] The treated water from the HTP is discharged through a 12-foot diameter outfall pipe extending five miles offshore into the Santa Monica Bay and the Pacific Ocean at a depth of 200 feet.

In addition to the HTP, the HSA includes the TWRP and the LAGWRP. The TWRP provides full primary, secondary, and tertiary treatment of wastewater and produces recycled water; however, all of the waste streams (sludge) from the TWRP are returned to the main sewer for final treatment at the HTP. The TWRP receives an average daily flow of 67 million gallons per day and has a dry weather flow capacity of 80 million gallons per day, resulting in an excess capacity of 13 million gallons per day. The TWRP is upstream of the Project Site, and thus, does not treat wastewater flows from the Project Site.

The LAGWRP is strategically located to serve east San Fernando Valley communities that are both within and outside of the Los Angeles City limits. The LAGWRP receives its influent wastewater from the North Outfall Sewer (NOS), thus providing hydraulic relief for the downstream conveyance facilities and the HTP, while producing recycled water. The LAGWRP provides full preliminary, primary, secondary, and tertiary treatment with disinfection. Similar to the TWRP, all sludge removed from the LAGWRP treatment process is returned untreated to the NOS for downstream treatment at the HTP. The LAGWRP is an upstream plant that typically operates at capacity and treats constant flows, since it has the ability to bypass any excess wastewater flow to the HTP for treatment. As such, while the LAGWRP may receive wastewater flows from the Project Site, wastewater flows from the Project Site may also bypass the LAGWRP for treatment at the HTP, depending on daily conditions at the LAGWRP.

When these two facilities are combined with the HTP, the HSA has a dry weather flow capacity of approximately 550 million gallons per day (consisting of 450 mgd at HTP, 80 mgd at TWRP, and 20 mgd at LAGWRP).[3] During storm events, stormwater drainage makes its way into the wastewater treatment system. This resulting stormwater drainage is known as wet weather flows. Both the TWRP and HTP facilities within the HSA have specialized treatment processes that are implemented during wet weather flows that temporarily increase the capacity of the treatment facilities. For instance, the HTP has a peak weather wet flow (PWWF) capacity of 850 million gallons per day, while the TWRP has a PWWF of 160 million gallons per day.[4] As the LAGWRP continuously operates at

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[2] *Ibid.*

[3] *Ibid.*

[4] *City of Los Angeles Integrated Resources Plan, Facilities Plan, Volume 2: Wastewater Management, pages 7-3, 7-59, and July 2004 (Revised November 2005).*

capacity, any increase in flows as a result of storm events is bypassed to the HTP. Although storm events can increase wastewater flows, the average dry weather flow is the metric utilized to determine daily remaining capacity at wastewater facilities within the HSA.

As the HTP discharges its effluent into the Santa Monica Bay, in addition to the local regulations discussed below, the HTP is regulated by various Federal, State, and regional entities. The Los Angeles Regional Water Quality Control Board ("LARWQCB") enforces Section 122.41(m) of part 40 of the Code of Federal Regulations ("CFR"), which prohibits the bypassing of water treatment facilities and sanitary sewer overflows. In addition to CFR, the sewer conveyance system is subject to regulation by the South Coast Air Quality Management District ("SCAQMD"), which responds to claims regarding odors. The HTP is also subject to the State Ocean Plan, the Clean Water Enforcement and Pollution Prevention Act of 1999 (SB 709), and a National Pollution Discharge Elimination System ("NPDES) Permit (Permit # CA0109991). The HTP meets all existing requirements under these regulations.

b. Local Wastewater Conveyance Infrastructure

Wastewater flows from existing structures on the Project Site are conveyed to the public sewage system via an on-site network of private sewer lines. The Project Site connects to the public wastewater system within a sewer easement running under Memorial Drive at the northern end of the Project Site (i.e., the Forest Lawn Memorial-Park - Hollywood Hills' main entrance) where the private on-site wastewater line connects to an existing 8-inch public line under Forest Lawn Drive. Wastewater flows are then directed eastward and are conveyed to a 48-inch line in Buena Vista Street, then into a 60-inch line and 48-inch line in the Riverside Drive right-of-way. Wastewater flows then feed into the Mariposa Siphon, before being discharged into a 48-inch line in the Forest Lawn Drive right-of-way. This line, together with the larger network of sewage infrastructure, conveys Project Site wastewater flows to the HTP. As noted above, some flows from these area sewers may be diverted to the LAGWRP for treatment into recycled water, depending on conditions.

According to the City of Los Angeles Bureau of Sanitation, while the current depth to diameter ratio flow levels in the 8-inch and 48-inch lines in Buena Vista Street and the Riverside Drive right-of-way and the 60-inch line cannot be determined at this time, existing gauging information indicated that the current flow level (d/D) in the 48-inch line on Forest Lawn Drive right-of-way is approximately 25 percent full. The design capacities at d/D of 50 percent are: 229,000 gallons per day for the 8-inch line in Buena Vista Street; 14.93 million gallons per day for the 48-inch line in Buena Vista Street; 14.93 million gallons per

day for the 48-inch line in the Riverside Drive right-of-way; 27.07 million gallons per day for the 60-inch line in the Riverside Drive right-of-way; and 30.78 million gallons per day for the 48-inch line in the Forest Lawn Drive right-of-way.[5]

(1) Existing Wastewater Flows

The Project Site is currently largely developed as a cemetery use and includes approximately 98,679 square feet of occupied floor area within existing structures on the property. These structures include such uses as administrative offices, mortuary, chapels and church buildings that contribute to the existing wastewater flows.

Current wastewater flow level data from the existing on-site uses is not available. However, based upon the estimated water consumption at the Project Site, it is estimated that the existing occupied floor area on the Project Site generates wastewater flows on the order of 21,164 gallons per day. As discussed in Section II, Project Description, an additional 8,723 square feet of net new occupied floor area is anticipated to result from several Interim Projects, which are considered as part of the existing environmental baseline conditions for purposes of evaluating project impacts to public utility services. The Interim Projects would generate approximately 1,867 gallons of wastewater per day. Thus, the combined estimated wastewater flows generated by the existing occupied floor area together with the Interim Projects would be on the order of 23,031 gallons per day. The proposed Project also utilizes approximately 560,451 gallons of recycled water per day for landscaping purposes. However, this water is absorbed by landscaping on the Project Site and does enter the City's wastewater conveyance system.

a. Regulatory Setting

(1) City of Los Angeles General Plan Framework

The City of Los Angeles General Plan Framework provides a citywide strategy for long-term growth. As such, it addresses State and Federal mandates to plan for the future. Chapter 9, Infrastructure and Public Services, of the City's General Plan Framework identifies goals, objectives, and policies for utilities in the City. Goal 9A of Chapter 9 provides for adequate wastewater collection and treatment capacity for the City and in basins tributary to City-owned wastewater treatment facilities.

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[5] *Letter correspondence from Brent Lorscheider, Acting Division Manager, Wastewater Engineering Division, Los Angeles Bureau of Sanitation, August 28, 2008.*

(2) Los Angeles Municipal Code (LAMC)

LAMC Sections 64.11 and 64.12 require approval of a sewer permit (S-Permit) prior to connection to the sewer system. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength as well as volume. The determination of wastewater strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Fees paid to the Sewerage Facilities Charge are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes including but not limited to industrial waste control and water reclamation purposes.

Section 64.15 of the LAMC requires that the City perform a Sewer Capacity Availability Review (SCAR) when any person seeks a sewer permit to connect a property to the City's sewer collection system, proposes additional discharge through their existing public sewer connection, or proposes a future sewer connection or future development that is anticipated to generate 10,000 gallons or more of sewage per day. A SCAR is an analysis of the existing sewer collection system to determine if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant.

In addition, the Bureau of Engineering Special Order No. SO06-0691 sets forth design criteria for sewer systems. Specifically, the order states that trunk, interceptor, outfall, and relief sewers (i.e. sewers that area 18 inches or greater in diameter) be designed for a planning period of 60-100 years and lateral sewers (sewers less than 18 inches in diameter) be designed for a planning period of 100 years. The order also requires that sewers be designed so that the peak dry weather flow (PDWF) depth, during their planning period, shall not exceed one-half (i.e., 50 percent) the pipe diameter.

(3) Wastewater Facilities Plan/Integrated Resources Plan

The City's sewer system is subject to Section 201 of the federal Clean Water Act. According to the Clean Water Act, the City must adopt a facilities plan in accordance with the United States Environmental Protection Agency (EPA) Rules and Regulations, 40 CFR, Section 35.917. Section 201 specifies the following:

> Facilities planning will demonstrate the need for facilities and, by a systematic evaluation of feasible alternatives, will also demonstrate that the proposed measures represent the most cost-effective means of meeting established effluent and water quality goals while recognizing environmental and social considerations.

In 2006, the City adopted the Integrated Resources Plan (IRP), which incorporates a City-prepared Wastewater Facilities Plan to address wastewater demand and capacity through 2020. The IRP serves to update the information prepared in the previous 1991 Wastewater Facilities Plan, while also considering the needs of the City's reclaimed water and urban runoff systems. Within the Project Site area, the installation of a new trunk sewer in Forest Lawn Drive is planned, with a connection under the Los Angeles River Flood Control Channel to the LAGWRP. Specifically, the IRP was developed to accommodate the projected increase in wastewater flow over the next 20 years while maximizing the beneficial reuse of reclaimed water and urban runoff and, as a result, optimizing the use of the City's existing facilities and water resources. Growth projections and data sources used in the IRP were based on the Southern California Association of Governments (SCAG) 2001 Regional Transportation Plan, as well as the 2004 Regional Transportation Plan, which estimates that the population of Los Angeles would reach almost 4.3 million people by 2020.

In order to meet the future demands posed by increased wastewater generation, the City chose to expand its current overall treatment capacity, while maximizing the potential to reuse reclaimed water through irrigation and other approved uses, including groundwater replenishment. According to the IRP, the only water reclamation plant capable of providing reclaimed water for replenishment is the TWRP in the Sepulveda Basin in Van Nuys. As identified in the IRP, the HTP can currently treat roughly 450 million gallons of wastewater per day, the TWRP can accommodate approximately 80 million gallons per day and the LAGWRP can accommodate approximately 20 MGD.[6] The TWRP is currently treating approximately 67 million gallons per day.[7] With an expected 18.7 percent population growth to occur in the City, the IRP indicates that the TWRP may be increased in size to convey approximately 100 million gallons per day of wastewater by 2020. These improvements, along with new sewer pipelines, will ensure that untreated wastewater is not discharged to rivers or the ocean, thereby protecting the environment.

As stated previously, the IRP also proposes to maximize reclaimed water reuse through groundwater replenishment. This is considered a valuable potential benefit, since it would allow the City to reduce the need to import water from other regions. However, the IRP states that if the City does not implement groundwater replenishment by the time additional treatment capacity is needed, the expansion of wastewater treatment capacity would occur at the HTP rather than at the Tillman Water Reclamation Plant. This would

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[6] *City of Los Angeles Department of Public Works, Bureau of Sanitation. Wastewater: About Wastewater, Facts and Figures. Available at: http://www.ci.la.ca.us/SAN/wastewater/factsfigures.htm. Accessed June 22, 2010.*

[7] *Ibid.*

result in additional wastewater capacity levels at the HTP and improved sewer facilities and pipelines.

In general, implementation of the IRP will enable the City to adequately convey wastewater to the treatment plants with minimal potential for sewage spills. It will also enable the City to treat future wastewater flows while protecting public health and safety and meeting regulatory requirements, thereby protecting the environment, in general, and surface waters, in particular.

(4) Collection System Settlement Agreement

Over 6,500 miles of sewer lines convey wastewater to the City's four wastewater treatment plants. Approximately 550 million gallons per day flow through the system, which serves both the City of Los Angeles and 29 contracting cities and agencies.

The City also regulates the sewer conveyance system through the Collection System Settlement Agreement (Settlement Agreement) and the 10-year L.A. Sewers Program. The Settlement Agreement, which has a compliance term of 10 years, is a settlement agreement reached in 2004 to resolve a lawsuit brought against the City by the Santa Monica Baykeeper and other community organizations, as a result of sanitary sewer overflows that occurred in the City in February 1998. The Settlement Agreement requires the City to enhance, repair, and update the sewer system and sets specific timelines for the City to complete the upgrades. It also mandates that the City spend $8.5 million in supplemental environmental enhancement projects. The City must prepare annual progress reports detailing its success at meeting the terms of the Settlement Agreement. The most recent annual report, published in August 2009, indicates that the City is currently in full compliance with the Settlement Agreement and in most cases, has exceeded its requirements. Overall, 110 of the total 150 Settlement Agreement-required deliverables have been completed to date. The 10-year L.A. Sewers Program was put into place in order to carry out the mandates of the Settlement Agreement, and is currently managing approximately 100 sewer infrastructure improvement projects.

2. Environmental Impacts

a. Methodology

The analysis of the proposed Project's impacts on wastewater conveyance and treatment capacity is based on the available capacities at wastewater treatment and conveyance facilities serving the Project Site. The estimated wastewater generation of the Project is based on calculated water consumption for the proposed Project. The future daily water demand flows for the Project were determined based on the Project Site's current water consumption rates, which were applied to the future on-site conditions. The

proposed Project's water consumption can be found in Section IV.K.2-2, Public Utilities – Water, of this Draft EIR.

In the analysis of potential impacts on wastewater treatment facilities, the anticipated on-site wastewater generation was compared against the identified capacity of the wastewater treatment facilities serving the Project Site. Because wet weather flow capacities at area wastewater treatment facilities are designed to be implemented for only short periods of time, the proposed Project's wastewater flows were compared against the average dry weather flow capacity at the treatment facilities serving the Project Site. As discussed above, there are three wastewater treatment facilities in the HSA; the HTP, the TWRP, and the LAGWRP. However, the TWRP is upstream of the Project Site, and thus, does not provide treatment services to the Project Site. Furthermore, while the LAGWRP could theoretically treat wastewater flows from the Project Site, the facility typically operates at capacity and bypasses any additional wastewater flows onto the HTP through the NOS. Moreover, and also noted above, all sludge removed from the TWRP and LAGWRP treatment process are returned untreated to the NOS for downstream treatment at the HTP. As such, for the purposes of this analysis, all wastewater generated at the Project Site was assumed to be treated at the HTP.

Regarding local wastewater conveyance facilities, the below analysis relies on sewer capacity information provided by the City. With respect to the larger, regional wastewater lines, the proposed Project's anticipated wastewater flows were compared against the current flow volumes and design capacities of these wastewater pipes to determine if adequate capacity exists to accommodate the proposed Project's anticipated wastewater flows. At this time, flow information is unavailable for the smaller local wastewater lines that serve the immediate vicinity of the Project Site. As a result, the below analysis relies on the standard City permitting process to determine if adequate capacity exists in these smaller, local wastewater lines.

Where capacity deficiencies would occur as a result of the proposed Project, the necessary improvements needed to accommodate the Project's demands and the responsible party for implementing these improvements are identified.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to wastewater. These questions are as follows:

Would the project:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?
- Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

In the context of these questions from the CEQA guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that a project would normally have a significant wastewater impact if:

- The project would cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or
- The project's 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.[8]

c. Project Impacts

(1) Construction

No significant increase in wastewater flows from the Project Site is expected as a result of construction activities. It is anticipated that the existing connections to the wastewater lines along Forest Lawn Drive would be adequate to serve the proposed Project and that any upgrades to the wastewater infrastructure would be limited to on-site improvements. As such, the construction of wastewater infrastructure would most likely be localized to the Project Site and immediate vicinity. However, as discussed in detail below, there is the potential that an improved or secondary sewer line could be required along Forest Lawn Drive. In the event that off-site sewer improvements are required, construction

[8] *The Wastewater Facilities Plan referenced in the City of Los Angeles CEQA Thresholds Guide has since been superseded by the Integrated Resources Plan.*

impacts (street, traffic detouring and control, and impacts to other utilities) would be limited to trenching for the sanitary sewer lines and would be temporary in nature. Where any utility line construction encroaches into public right-of-way, review and approval by LADOT would be required. As a result, a single lane of traffic in each direction, as well as access to the Project Site and surrounding properties, would be maintained at all times during construction. Therefore, Project construction would result in a less than significant impact with respect to the installation of wastewater conveyance infrastructure.

(2) Operation

(a) Wastewater System Facilities

As previously stated, the HTP currently processes average wastewater flows of approximately 362 million gallons per day, resulting in a remaining capacity of approximately 88 million gallons per day. As discussed in Section IV.K.2-2, Public Utilities – Water, of this Draft EIR, based on current demand rates, the proposed Project would result in an increased demand on domestic water supply services of approximately 4,815 gpd. Based upon this net increase in water demand, the proposed Project would result in a net increase in wastewater flows of approximately 4,815 gallons per day, which represents only approximately 0.005 percent of the total remaining capacity at the HTP. When added to the existing baseline on-site wastewater generation of 23,031 gallons per day, the proposed Project's total on-site wastewater generation would be approximately 27,846 gallons per day. As such, the proposed Project's total wastewater flow, at build-out when combined with existing cemetery development, represents only approximately 0.03 percent of the total remaining capacity at the HTP as shown in Table IV.K-1 on page IV.K-11.

As such, the proposed Project would not substantially or incrementally exceed the future scheduled capacity of the HTP by generating flows greater than those anticipated in the IRP. The estimated increase in flow that would be generated from the proposed Project would be adequately served by the HTP, which has sufficient capacity to serve the Project. Thus, the Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP. Project impacts to the HTP would be less than significant.

(b) Local Wastewater Conveyance Infrastructure

Implementation of the proposed Project would result in the development of approximately 22,500 square feet of occupied floor area that could result in an increased demand on wastewater services. The increase of 1.1 million square feet of non-occupied floor area for mausoleum, columbaria, crypts, and garden areas would not generate any sewer flows and thus would not place any additional demands upon the City's

Table IV.K-1
Current and Future Wastewater Flow

Existing Conditions (gpd)	Future with Project (gpd)	Remaining Capacity at HTP (gpd)	Project Percent of HTP Remaining Capacity
23,031	27,846	88,000,000	0.03

Source: Matrix Environmental, 2010

wastewater service system. The City of Los Angeles Bureau of Sanitation, Wastewater Engineering Services Division conducted a preliminary evaluation of the potential impacts to the wastewater system for the proposed Project. As mentioned above, the proposed Project is anticipated to result in a net increase in wastewater flows of approximately 4,815 gallons per day. When added to the existing baseline on-site wastewater generation of 23,031 gallons per day, the proposed Project's total on-site wastewater generation would be approximately 27,846 gallons per day. As noted above, the current depth to diameter ratios in the 8-inch and 48-inch lines in Buena Vista Street and the Riverside Drive right-of-way and the 60-inch line cannot be determined at this time. However, existing gauging information indicate that the 48-inch line on the Forest Lawn Drive right-of-way is approximately 25 percent full. Since the 48-inch line is currently 25 percent full and is designed to accommodate 30.78 million gallons per day, the proposed Project's 27,846 gallons per day would represent 0.09 percent of the remaining capacity of the 48-inch line. As such, there is sufficient capacity in the 48-inch line in Forest Lawn Drive to accommodate the Project's increased wastewater flows.

While the current remaining capacity of the wastewater lines that flow into the 48-inch line on Forest Lawn Drive cannot be determined at this time, before the Department of Building and Safety formally accepts a set of plans and specifications for a project for plan check, the LADPW must first determine if there is allotted sewer capacity available for the Project. In addition, the City would require the approval of a sewer permit prior to the construction of the proposed Project. In the event that during the permitting and development process, wastewater lines are found to contain insufficient capacity, be substandard, or in deteriorated condition, a larger sewer line or a secondary sewer line would be necessary to connect to the nearest larger sewer line with sufficient capacity. Should a larger or secondary line be required at a future date, the Applicant would be required by City regulations to make necessary improvements to achieve adequate service in consultation with the Los Angeles Department of Public Works (LADPW) Bureau of Sanitation. The design of these wastewater lines would be developed by a registered engineer and approved by the City. As a result, the issuance of all applicable building

permits would ensure that adequate sewer capacity is available prior to the start of construction.

As such, the proposed Project is not anticipated to cause a substantial increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Impacts upon the local wastewater infrastructure system would therefore be considered less than significant.

(c) Consistency with General Plan and IRP

As discussed in Section IV.H, Land Use Planning, of this Draft EIR, the proposed Project would be consistent with both the Hollywood Community Plan and all elements of the General Plan. As such, the proposed Project's wastewater generation would be consistent with the proposed land uses and wastewater generation envisioned under the General Plan and incorporated into the IRP.

With respect to the IRP, as discussed above, the future wastewater demand throughout the HSA is addressed in the IRP, which was developed to accommodate the projected increase in wastewater flow over the next 20 years while maximizing the beneficial reuse of recycled water and urban runoff, and as a result, optimizing the use of the City's existing facilities and water resources. The IRP's projections and recommendations are based on SCAG's population projections for 2020, which include future population growth projections throughout the HSA. The IRP concluded that the City will be able to serve future demand for wastewater treatment service through planned expansions to its current overall treatment capacity. In addition, the IRP provides for the development of additional wastewater treatment if triggered by an increase in population (beyond what is projected), regulations, and/or groundwater replenishment needs. These "Go-If-Triggered" projects include the potential expansion and upgrade of the TWRP to accommodate up to 100 MGD of wastewater.[9]

While the proposed Project would extend beyond the planning timeframe (2020) of the IRP, it is assumed that future IRPs would be prepared and adopted, and the same conservation measures and infrastructure improvements, or yet other unknown factors, would extend wastewater treatment capacity to 2050 and beyond. When considering the IRP forecast, it is important to note that the previous IRP forecasted the HTP reaching capacity at a much earlier date. Increased water conservation efforts and reduced population forecasts are the factors that caused the date HTP capacity is reached to be

[9] *City of Los Angeles, Integrated Resources Plan, Executive Summary, December 2006, page 15.*

extended further into the future. Further, it is important to consider that the proposed Project's net increase in wastewater generation of 4,815 gallons per day would be a negligible portion of the overall future increase in wastewater flows within the HSA.

As a result, the proposed Project would be consistent with the policies regarding wastewater set forth in the City's General Plan and the IRP and a less than significant impact would result. No mitigation measures are required.

3. Cumulative Impacts

It is anticipated that the proposed Project, in conjunction with other expected growth within the area served by the HTP, will result in cumulative increases in wastewater generation. However, future increases in wastewater flows throughout the HSA are addressed in the IRP, which as mentioned above, has determined that existing wastewater processing facilities are sufficient to handle projected flows through 2020. Further, the IRP provides for development of additional wastewater treatment infrastructure projects if triggered by an increase in population (beyond what is projected), regulations, and/or groundwater replenishment needs. These "go-if-triggered" projects include the potential expansion and upgrade of the Tillman Wastewater Reclamation Plant to accommodate up to 100 million gallons per day of wastewater.

Cumulative wastewater impacts of the proposed Project and expected growth through the year 2020 would be accommodated by facilities and improvements envisioned by the IRP. The proposed Project's contribution to cumulative wastewater generation would not be individually or cumulatively significant; it is not growth inducing and (based on the Project's consistency with the existing General Plan and zoning) it was included in the growth projections that were used as the basis for the IRP. Further, the proposed Project's net increase in wastewater flows is negligible when considering the overall wastewater flows within the local sewer infrastructure and within the HSA. While cumulative increases in wastewater generation would be accommodated by facilities and improvements identified in the IRP, future growth beyond the timeframe of the IRP (i.e., beyond 2020) has not been identified, and is not foreseeable. As such, the above analysis of cumulative impacts related to wastewater treatment capacity relies on the IRP and its conclusions.

4. Mitigation Measures

As discussed above, the proposed Project's impacts to the wastewater infrastructure would be less than significant without mitigation. Nonetheless, the following mitigation measure is provided to reduce wastewater generation within the Project Site:

Mitigation Measure K.1-1: Any new structures that include restrooms shall include the following features, as applicable:

- High-efficiency toilets (maximum 1.28 gpf), including dual-flush water closets, and high-efficiency urinals (maximum 0.5 gpf), including no-flush or waterless urinals.
- Restroom faucets with a maximum flow rate of 1.5 gallons per minute.
- Restroom faucets shall be of a self-closing design.

5. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. Potential impacts upon the local wastewater infrastructure system would therefore be less than significant and no mitigation measures are required.

The Project's additional wastewater flows would not substantially or incrementally exceed the future scheduled capacity of the HTP. Project impacts upon the service capacity of the HTP would be less than significant and no mitigation measures are required.

IV. Environmental Impact Analysis

K.2 Public Utilities - Water

This Section describes the water infrastructure that currently serves the Project Site and surrounding area, assesses potential impacts associated with the Project on this infrastructure, and identifies the need for improvements in order to serve the Project and related development, if needed.

1. Environmental Setting

a. Regional Water Supply

The Los Angeles Department of Water and Power (LADWP) provides potable water to the City of Los Angeles and is responsible for ensuring that water demand within the City is met and that State and federal water quality standards are achieved. The City's water supplies are primarily derived from the four following sources: (1) the Eastern Sierra Nevada Mountains via the Los Angeles Aqueduct (LAA) system; (2) local groundwater basins; (3) purchases from the Metropolitan Water District (MWD); and (4) recycled water. In addition, water storage is essential for the LADWP to supply water during high demand conditions and provide for firefighting and emergencies. The City water system has 108 tanks and reservoirs ranging in size from 10 thousand to 60 billion gallons with a total capacity of 109 billion gallons. Water is distributed through a network of over 7,200 miles of water mains ranging from 4 inches to 120 inches in diameter. Because of the size and range in elevation (0 to 2,400 feet), the system has been divided into 102 pressure zones, with almost 90 booster pumping stations to provide water service at higher elevations. Water supplies for the LADWP, listed by source (including storage and transfer), are depicted in Table IV.K-2 on page IV.K-16. A detailed discussion of each of these sources and the potential challenges facing each of the sources can be found in the text immediately below.

(1) Los Angeles Aqueduct (LAA)

The LAA collects and conveys runoff from snowmelt in the Eastern Sierra Nevada Mountains, where the City holds water rights, to the City of Los Angeles. Secondarily, LAA water supplies are supplemented by groundwater pumping in the Owens Valley, which can fluctuate year-to-year due to varying hydrological conditions. A detailed discussion of the quantity of groundwater extracted from the Owens Valley is found immediately below. In

Table IV.K-2
Los Angeles Department of Water and Power 1999-2009 Water Supply

Year	Los Angeles Aqueduct	Local Groundwater	MWD	Recycled Water	Transfer, Spread, Spills, and Storage [a]	Total
1999	309,037	170,660	164,112	1,812	-3,507	**649,128**
2000	255,183	87,946	336,116	1,998	2,569	**678,674**
2001	266,923	79,073	309,234	1,675	-1,994	**658,899**
2002	179,338	92,376	410,329	1,945	-1,405	**685,392**
2003	251,942	90,835	322,329	1,759	2,528	**664,338**
2004	202,547	71,831	391,834	1,774	-2,958	**670,944**
2005	368,839	56,547	185,346	1,401	3,140	**608,993**
2006	378,922	63,270	188,781	4,890	-1,336	**637,199**
2007	129,400	89,018	439,436	3,639	1,044	**660,449**
2008	147,365	60,149	429,110	7,051	1,664	**642,011**
2009	137,084	64,996	354,789	7,489	3,052	**561,306**

Note: Units are in acre-feet (AF)

[a] *A negative number does not represent a loss. Rather, the negative number indicates the amount of water that has been taken or stored into the reservoir system. A positive number indicates spills from the reservoir system.*

recent years, the LAA supplies have been less than historically normal because of environmental obligations to restore Mono Lake and mitigate dust from Owens Lake. In 2009, the Los Angeles Aqueduct system supplied approximately 24 percent, or approximately 137,084 acre-feet (AF) per year of the City's water supplies. Average deliveries from the LAA system have been approximately 239,100 AF of water annually over the last five fiscal years. LADWP projects that the average annual LAA delivery is expected to be between approximately 200,000 AF to 230,000 AF.

(2) Groundwater

The LADWP extracts groundwater from various locations throughout the Owens Valley and four local groundwater basins. The LADWP appropriates groundwater from its lands in the Owens Valley and in Los Angeles, as part of its long-term groundwater management plan. In addition to rights in the Owens Valley, the LADWP holds adjudicated extraction rights in the following four local groundwater basins: (1) San Fernando; (2) Sylmar; (3) Central; and (4) West Coast. The LADWP currently exercises its adjudicated extraction rights in three of these four groundwater basins; the San Fernando, Sylmar, and Central Basins. In 2009, local groundwater provided 12 percent of the City's potable (domestic) water supply.

The Owens Valley, which is located on the eastern slope of the Sierra Nevada Mountains, encompasses approximately 3,300 square miles of drainage area. Table IV.K-3 on page IV.K-18 shows the latest extractions by LADWP from Owens Valley. As shown therein, LADWP extracted 68,149 AF of groundwater in the 2008-2009 runoff year (April 1 through March 31).

The Owens Valley is not identified as an overdrafted basin in the California Department of Water Resources (DWR) California's Groundwater Bulletin 118 Update 2003. Furthermore, the Bulletin 118 Update 2003 does not project the Owens Valley to become overdrafted if present groundwater management conditions continue. In addition, in 1990, as part of the long-term groundwater management agreement, the City and Inyo County have prepared the "Green Book for the Long Term Groundwater Management Plan for the Owens Valley and Inyo County." This document contains plans and procedures to prevent overdraft conditions from groundwater pumping and to manage vegetation in the Owens Valley.

With respect to local groundwater basins, the San Fernando and Sylmar Basins are subject to the judgment in City of San Fernando vs. City of Los Angeles. Pursuant to that judgment, pumping must be reported to the court-appointed Upper Los Angeles River Area (ULARA) Watermaster. The Central Basin is also subject to court judgments. Pumping is reported to the DWR, which acts as Watermaster.

The San Fernando Basin, which consists of 112,000 acres of land and comprises 91.2 percent of the ULARA, is the largest of four basins within the ULARA. LADWP has accumulated nearly 406,313 AF of stored water credit in the San Fernando Basin as of October 2008 (120,560 AF of stored water credits that are available to be pumped now and 285,753 AF that are held in reserve). This water can be withdrawn from the basin during normal and dry years or in an emergency, in addition to LADWP's approximately 87,000 AF annual entitlement in the basin. The Sylmar Basin, located in the northern part of the ULARA, consists of 5,600 acres of land and comprises 4.6 percent of the ULARA. LADWP currently has an annual entitlement of 3,405 AF from the Sylmar Basin. In addition, LADWP has adjudicated rights to extract groundwater from the Central Basin. Annual entitlement to the Central Basin is 15,000 AF.

As shown in Table IV.K-3, from the 2008 to 2009 water year (October through September), LADWP extracted 53,023 AF from the San Fernando Basin, 868 AF from the Sylmar Basin, and 11,817 AF from the Central Basin. LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported water supplies. Extraction from the basins will, however, be limited by water quality and overdraft protection. Both LADWP and DWR have programs in place to monitor wells to prevent overdrafting. LADWP's groundwater pumping practice is based on a "safe yield" operation.

Table IV.K-3
Local Groundwater Basin Supply
(In Acre-Feet)

Year	Owens Valley	San Fernando	Sylmar	Central	West Coast [a]
2001-2002	73,349	66,823	1,240	8,639	0
2002-2003	82,281	78,045	3,662	9,811	0
2003-2004	87,726	72,235	2,634	15,907	0
2004-2005	85,820	46,815	1,509	14,870	0
2005-2006	57,412	35,428	1,853	13,395	0
2006-2007	58,621	70,837	4,032	14,416	0
2007-2008	60,337	50,009	2,996	10,754	0
2008-2009	68,149	53,023	868	11,817	0

Note: Groundwater extractions for all basins, except Owens Valley groundwater basin, represent extractions during water year (October through September). Owens Valley groundwater extractions are reported from April 1 to March 31.

[a] *No water was extracted from the West Coast Basin from 2001-2009.*

The objective, over a period of years, is to extract an amount of groundwater equal to the native and imported water that recharges the basin.

(3) Metropolitan Water District Supplies

The MWD generally supplies the remainder of the City's water demand not supplied by the LAA and groundwater extraction. The MWD supplies approximately 53 percent of the City's water supplies in an average year, although that number rose to 63 percent in 2009. The amount of water obtained from these sources varies from year to year, and is primarily dependent on weather conditions and demand. As shown in Table IV.K-2 on page IV.K-16 above, the MWD accounted for 354,789 AF of the 2009 LADWP water supply.

The MWD imports a portion of its water supplies from Northern California through the State Water Project's (SWP) California Aqueduct and from the Colorado River via the MWD's Colorado River Aqueduct. The LADWP continues to rely on the MWD to meet its current and future supplemental water needs. The LADWP is one of 26 member-agencies that have preferential rights to purchase water from the Metropolitan Water District. As of

July 2006, the LADWP has a preferential right to purchase 21.16 percent of the MWD's total water supply.[10]

Historically, the MWD has used various water shortage plans for calculating and administering member agency supply allocations should a water supply shortage be declared. More recently, and in response to the water supply challenges experienced in 2007 by MWD and its service area (discussed below), a Water Supply Allocation Plan (WSAP) was adopted on February 12, 2008, which incorporates key features and principles from the historical shortage allocation plans, but will supersede them as the primary overarching decision tool for water shortage allocation. Importantly, the WSAP includes specific formulas and implementation elements needed for administering an allocation should a shortage be declared. MWD's 1999 Water Surplus and Drought Management Plan and the recently adopted WSAP provide a framework to address periods of drought, which the LADWP (as a member Agency) would work within to acquire water supplies during periods of drought in the future. The various MWD plans to address recent water supply challenges are discussed in detail in the Regulatory Setting subsection of this Draft EIR section below.

As discussed therein, MWD plans to meet the long-term needs of its member-agencies through water transfer programs, outdoor conservation measures, and development of additional local resources (e.g., recycling, brackish water desalination, and seawater desalination). In addition, the MWD has approximately 5.0 million AF capacity available in surface and groundwater storage accounts (including Diamond Valley Lake near Hemet), with approximately 1.08 million AF currently in that storage.

(a) Challenges to the Colorado River Supply

California is apportioned the use of 4.4 million AF of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to but not used by Arizona and Nevada when such supplies have been requested for use in California. Under the priority system that has formed the basis for the distribution of Colorado River water made available to California, MWD was allotted 550,000 AF per year under a fourth priority right and 662,000 AF per year under a fifth priority right. Palo Verde Irrigation District (PVID), the Yuma Project, Imperial Irrigation District (IID) and the Coachella Valley Water District (CVWD) are the agricultural entities holding the first three priorities to the use of no more than 3.85 million AF under the water delivery contracts.

[10] *DWP, December 2009.*

Until 2002, MWD had been able to take full advantage of its fourth priority right as a result of the availability of surplus water and apportioned but unused water. However, Arizona and Nevada increased their water use from the Colorado River, leaving no unused apportionment available for California in 2002. In addition, a severe drought in the Colorado River Basin has reduced storage in system reservoirs. Prior to 2003, MWD could divert 1.2 million AF in any year, but since that time MWD's deliveries of Colorado River water varied from a low of 633,000 AF in 2006 to a high of approximately 905,000 AF in 2008 with annual volumes dependent on availability of unused higher priority agricultural water and increasing transfers of conserved water. Average annual net deliveries for 2003 through 2008 were approximately 762,000 AF, with annual volumes dependent on availability of unused higher priority agricultural water and increasing transfer of conserved water. An additional challenge facing MWD's Colorado River supply includes the risk of continued drought in the Colorado River Basin. Specifically, the Colorado River Basin has experienced below-normal runoff in recent years. In 2009, Lake Mead was at its lowest level in more than 40 years.

In response to these challenges, the MWD has entered into a series of agreements and established several plans to ensure adequate water supply from the Colorado River. The most significant of these is the 2003 Quantification Settlement Agreements (QSA) executed by the IID, CVWD, and MWD. The QSA establishes Colorado River water use limits for the IID, CVWD, and MWD; provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years; and restores the opportunity for MWD to receive any special surplus water under the Interim Surplus Guidelines. The Interim Surplus Guidelines were implemented by the Secretary of the Interior in January 2001 and adopted for use through 2016 for the purpose of providing a greater degree of predictability with respect to the availability and quantity of surplus water from the Colorado River. Another important component of the QSA is an amended Transfer Agreement of the April 1998 agreement between the San Diego County Water Authority (SDCWA) and IID for SDCWA's purchase from IID of Colorado River water delivery to IID. The amended Transfer Agreement set the maximum transfer amount at 205,000 AF in 2021, with transfer gradually increasing over an approximately 20 year period and declining to 200,000 AF per year beginning in 2023. With full implementation of the programs identified in the QSA, MWD expects to be able to annually divert 852,000 AFY of Colorado River water plus any unused agricultural water that may be available.

Other agreements executed by the MWD to ensure adequate water supply include: a 1992 agreement with the Central Arizona Water Conservation District to create 80,909 AF of long-term storage credits that may be recovered by Central Arizona Water Conservation District for MWD; a 1998 water conservation agreement with IID for water conservation projects that currently conserve 105,000 AFY; an August 2004 agreement with the Palo Verde Irrigation District for a Land Management, Crop Rotation and Water Supply Program that provides up to 118,000 AF of water available to MWD in certain years;

a May 2006 agreement with the Bureau of Reclamation to create the "Intentionally Created Surplus" program that allowed MWD to leave conserved water in Lake Mead that MWD would otherwise use in 2006 and 2007; and an April 2008 authorization of a $28.7 million expenditure with the Central Arizona Water Conservation District and Southern Nevada Water Authority for funding a new reservoir near Drop 2 of the All-American Canal in Imperial County, which could save up to 70,000 AF of water per year. In addition, in November 2007, the Bureau of Reclamation issued a Final Environmental Impact Statement regarding new federal guidelines concerning the operation of the Colorado system of reservoirs. These guidelines provide water release criteria from Lake Powell and water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin, provide a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead and extend the Interim Surplus Guidelines through 2026.

Litigation has been filed that also presents challenges regarding water supplies associated with the Colorado River. For example, on November 5, 2003, IID filed a validation action in Imperial County Superior Court seeking judicial determination that 13 agreements associated with the IID/SDCWA water transfer and the Quantification Settlement Agreement (QSA) executed by the Imperial Irrigation District, Coachella Valley Water District, and MWD in October 2003 (discussed below) are valid, legal and binding. On January 15, 2010, Judge Roland L. Candee ruled that the agreement itself was not valid due to environmental obligations to restore the Salton Sea.[11] An appeal is likely to be filed by the IID. Other lawsuits also were filed challenging the execution, approval and subsequent implementation of the QSA on various grounds. MWD filed an answer in the IID's validation proceeding and has been named as a defendant/respondent/cross defendant in certain cases as pertaining to the QSA and its related agreements. The QSA lawsuits could delay the implementation of programs authorized under the QSA or result in increased costs or other adverse impacts.

In addition, the Navajo Nation has filed litigation against the Department of the Interior (DOI), specifically the Bureau of Reclamation and the Bureau of Indian Affairs, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interest of the Navajo Nation. The complaint challenges the adequacy of the environmental review for the Interim Surplus Guidelines and seeks to prohibit the DOI from allocating any surplus water until a determination of the rights of the Navajo Nation is made. This litigation has not delayed implementation of the

[11] *http://www.latimes.com/news/local/la-me-water15-2010jan15,0,1867080.story*.

QSA. The adverse impact on MWD or its Colorado River supplies of the litigation described above cannot be adequately determined at this time.

Also, federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations. A number of species that are either endangered or threatened are present in the Lower Colorado River. However, the Lower Colorado River Multi-Species Conservation Program (MSCP) allows MWD to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The MSCP also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by MWD and other agencies.

In addition, in December 2007, the Grand Canyon Trust filed litigation against the Bureau of Reclamation alleging that the operation of the Glen Canyon Dam on the Colorado River does not comply with environmental regulations. MWD, IID, and the Central Arizona Water Conservation District have intervened in this pending case. Other environmental concerns that have been raised include the discovery of quagga mussels in Lake Mead. However, MWD has been implementing control strategies for mussels in MWD's lakes and reservoirs. Additional litigation with Cadiz Incorporated and the Soboba Band of Mission Indians that may affect the supplies of the Colorado River basin has also been filed.

(b) Challenges to the State Water Project Water Supply

Federal Endangered Species Act (ESA) Litigation filed by several environmental interest groups in the United States District Court for the Eastern District of California alleged that existing biological opinions and incidental take statements inadequately analyzed impacts on listed species under the Federal ESA. On May 25, 2007, Federal District Judge Wanger issued a decision on summary judgment finding the United States Fish and Wildlife Service's (USFWS) biological opinion for Delta smelt was invalid. On December 14, 2007, Judge Wanger issued his Interim Remedial Order requiring that the SWP and Central Valley Project operate according to certain specified criteria until a new biological opinion for the Delta smelt is issued. The USFWS released the new biological opinion on December 15, 2008. Based on the Water Allocation Analysis released by the DWR on December 19, 2008, which analyzed the biological opinion's effects on State Water Project operations, export restrictions under median hydrologic conditions could reduce deliveries to Metropolitan by 300,000 to 700,000 AF for 2009. These events have highlighted the challenges that water suppliers throughout the state currently face regarding supplies from the Delta. Additional litigation by other interests groups and SWP contractors is also ongoing.

On December 1, 2009, the DWR announced an initial 2010 SWP allocation of 5 percent of total contracted water deliveries to the SWP contractors. Five percent is the lowest initial allocation percentage since the SWP began delivering water in 1967. The initial allocation figure reflects the low carryover storage levels in the state's major reservoirs, ongoing drought conditions and federally mandated environmental restrictions on water deliveries from the Sacramento-San Joaquin Delta to protect endangered fish species. However, the initial allocation is a very conservative estimate of what DWP expects it can deliver, and historically the initial allocation increased during the year as supply conditions improved.

As mentioned above, the MWD has prepared and implemented various plans to address the water challenges facing the MWD. These plans are discussed in detail in the Regulatory Setting subheading of this Draft EIR section below.

(4) Recycled Water

The LADWP is continuing its water recycling efforts to reduce further the demand on imported water. Currently, almost 65,000 AFY of the City's wastewater is recycled. Approximately 1,950 AFY of recycled water is used for municipal and industrial purposes; 28,000 AFY of recycled water is used for environmental enhancement and recreation in the Sepulveda Basin; and approximately 34,000 AFY of reclaimed water is sold to the West Basin Municipal Water District, which then provides further treatment to meet demands within its service area.

The Los Angeles Greenbelt Project, dedicated in 1992, was the City's first commercial water recycling initiative. It brings recycled water from the Los Angeles-Glendale Water Reclamation Plant (LAGWRP) to Forest Lawn Memorial-Park - Hollywood Hills (the Project Site), Mount Sinai Memorial Park, Lakeside Golf Course, and Universal City. The Greenbelt Project delivers approximately 1,600 AFY of recycled water, freeing up drinking water for 3,200 families. The Forest Lawn Memorial-Park – Hollywood Hills property participates in the Greenbelt Project and over the last six years (from 2004 through 2009) has utilized an average of approximately 539,287 gallons per day of recycled water from the LAGWRP as shown in Table IV.K-4 on page IV.K-24.

b. Water Treatment

Much of the City's water flows from north to south, entering Los Angeles at the Los Angeles Aqueduct Filtration Plant in Sylmar, which is owned and operated by the LADWP. Water entering the Los Angeles Aqueduct Filtration Plant undergoes treatment and disinfection before being distributed throughout LADWP's Water Service Area. The Los Angeles Aqueduct Filtration Plant is the primary water treatment plant serving the Project

Table IV.K-4
Six-Year History of Water Use

Year	Domestic Water (gpd)	Reclaimed Water (gpd)	Total Water Use	
			gpd	AFY
2004	27,756	534,726	562,482	630
2005	18,914	488,633	507,547	569
2006	18,684	495,722	514,406	576
2007	35,121	570,909	606,030	679
2008	12,862	562,952	575,813	645
2009	13,648	582,778	596,476	668
Six-Year Average	**21,164 (3.8%)**	**539,287 (96.2%)**	**560,451**	**628**

Source: Forest Lawn Memorial-Park Association, September, 2010.

Site and has the capacity to treat approximately 600 million gallons per day. The average plant flow is approximately 450 million gallons per day during the non-summer months and 550 million gallons per day during the summer months, and thus the Los Angeles Aqueduct Filtration Plant operates at between 75 and 92 percent capacity. In addition to receiving water supplies from the Los Angeles Aqueduct Filtration Plant, the LADWP has indicated that the Project Site also receives water from the North Hollywood Pump Station, which treats a limited quantity of groundwater from area wells and maintains water pressure in the water delivery infrastructure throughout the Project vicinity.[12]

Water quality is closely monitored by the LADWP to ensure that it meets both State and federal water quality standards. The LADWP monitors over 90 regulated chemicals and bacteriological contaminants at varying frequencies, based on the type of constituent and the type of source water. Water samples are also regularly collected and tested from watersheds, reservoirs, groundwater supply wells, storage facilities, and other locations.

As discussed above, water purchased from the MWD comes from Northern California through the SWP's California Aqueduct and from the Colorado River. As the water flows through the Sacramento-San Joaquin Delta, it picks up organic material from

[12] *Letter correspondence from Charles C. Holloway, Manager of Environmental Assessment, Los Angeles Department of Water and Power, September 25, 2008.*

the riverbeds. The MWD treats this water with chloramines, a combination of chlorine and ammonia, to disinfect the water.

c. Local Water Infrastructure

The following information regarding the existing conditions of the local water infrastructure system was provided by the LADWP. This information was provided in response to a preliminary request for service-related information for consideration and incorporation into the planning, design and development efforts for the proposed Project.

(1) Domestic Water

The LADWP currently provides domestic water service to the Project Site. Domestic and fire water flow for the existing uses on the Project Site is provided via a low-pressure, 24-inch domestic water main located in Forest Lawn Drive. This main can supply approximately 5,000 gallons per minute (gpm). There is also a high-pressure, 8-inch domestic water main in Forest Lawn Drive that can supply approximately 1,260 gpm fire flow and 400 gpm domestic flow.

The LADWP's domestic water distribution system currently supplying the Project Site lacks adequate water pressure. The available fire flow may also be considered below desirable levels. The static water pressure in the area is 122 pounds per square inch (psi) maximum and 5 psi minimum based on a water meter elevation of 480 feet above sea level for the low-pressure domestic water system. The static water pressure in the area is 283 psi maximum and 209 psi minimum based on a ground elevation of 517 feet above sea level for the high-pressure domestic water system.

The LADWP is designing a domestic water trunk line to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure.

(2) Recycled Water

The Project Site is served with reclaimed water by a 16-inch water line in Forest Lawn Drive. Forest Lawn has an agreement with the LADWP for the purchase of recycled water for the Project Site.[13] Pursuant to the agreement, the LADWP delivers reclaimed water to the Project Site at a maximum peak hour flow rate of 1,500 gpm. The static water

[13] *Agreement By and Between the DWP of the City of Los Angeles and Forest Lawn Memorial Park Association Regarding Reclaimed Water Service, Agreement No. 10949, May 9, 1991.*

pressure in the area is 192 psi maximum and 34 psi minimum based on a water meter elevation of 480 feet above sea level for the reclaimed water system. Further, in order to achieve the City's goal of increased recycled water levels to reduce the demand for domestic water, LADWP is currently working to identify and implement recycled water infrastructure improvements to upgrade and expand the City's existing recycled water infrastructure, including improvements in the vicinity of the Project Site.

d. Existing On-Site Water Demands

(1) Domestic Water Use

The Project Site is currently largely developed as a cemetery use and includes approximately 98,679 square feet of occupied floor area within existing structures on the property. These structures include such uses as administrative offices, mortuary, crematories, chapels and church buildings that contribute to the existing demand on domestic water supply. Importantly, the existing non-occupied structures not including garden structures (which comprise approximately 36 percent of the total existing structural square footage) do not contribute to the existing demands for domestic water. Over a six-year history (from 2004 to 2009), the annual average domestic water demand for the Project Site has been approximately 7,724,860 gallons per year, or 21,164 gallons per day (gpd) (refer to Table IV.K-4 on page IV.K-24). This equates to approximately 214 gallons of water per 1,000 square feet of occupied floor area per day. The Project Site currently contains an existing on-site private domestic water storage and pumping facilities to meet on-site demands.

The development of Interim Projects would result in the addition of approximately 8,723 square feet of occupied floor area and the installation of a new high-pressure water service line with approximately 1,130 lineal feet of pipe. Based on the existing rate of water use at the Project Site, the Interim Projects are estimated to increase water demands by approximately 1,867 gpd, resulting in a total baseline water use of 23,031 gpd for the Project Site.

(2) Recycled Water Use

As stated previously, Forest Lawn has an agreement with the LADWP for the purchase of reclaimed water for the Project Site, and the irrigation needs for landscaped areas on the Project Site are served by LADWP's recycled water line. As shown in Table IV.K-4 on page IV.K-24, based on a six-year history of reclaimed water use at the Project Site, the Forest Lawn Memorial-Park - Hollywood Hills property utilized an average of 560,451 gpd of reclaimed water. Of the 444-acres that comprise the entire Project Site, approximately 175 acres are developed and landscaped with lawns, garden areas and ground cover. The remaining acres consist of natural and disturbed vegetation and are not

irrigated. Thus, based upon the 175 acres that are currently irrigated, the existing irrigation demand for landscaped and garden areas is approximately 3,000 gpd per acre. In limited instances when recycled water is not available, domestic water is used. To provide recycled water capacity, the Project Site includes two on-site private pump stations and two reservoirs, each of which stores approximately 100,000 gallons of reclaimed water.

e. Regulatory Setting

(1) State Level

(a) California Urban Water Management Planning Act

In accordance with the State of California Urban Water Management Planning Act of 1984, all urban water suppliers that provide municipal and industrial water to more than 3,000 customers, or supply more than 3,000 AFY of water, are required to prepare and adopt an Urban Water Management Plan (UWMP). The LADWP, which provides over 700,000 water service connections, most recently updated its UWMP in December 2005. The next UWMP Update is scheduled for completion by December 31, 2010.

(b) Senate Bill 610 and Senate Bill 221 - Water Supply Assessments

State of California Senate Bill (SB) 610 and SB 221 require detailed information regarding water availability to be provided to city and county decision-makers prior to approval of specified large development projects. SB 610 requires that a Water Supply Assessment must be prepared by the urban water supplier for certain development projects subject to CEQA in order to determine if the anticipated water demand associated with a proposed project is included as a part of the most recently adopted Urban Water Management Plan. Pursuant to SB 610, projects that are required to obtain Water Supply Assessments include the following:

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons;
- a proposed commercial office building of more than 250,000 square feet of floor space or employing more than 1,000 persons;
- a proposed hotel or motel of more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;

- a mixed-use project that falls in one or more of the above-identified categories; or
- a project not falling in one of the above-identified categories but that would demand water equal or greater than the amount required by a 500-dwelling unit project.

SB 221 also addresses water supply in the land use planning process and focuses on new residential subdivisions in non-urban areas. SB 221 requires that written verification from the water service provider be submitted indicating sufficient water supply is available to serve a proposed subdivision, or the local agency shall make a specified finding that sufficient water supplies are or will be available prior to completion of a project. SB 221 specifically applies to residential subdivisions of 500 units or more. In addition, Government Code Section 66473.7(i) exempts "…any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households."

The proposed Project is not subject to the requirements of SB 610 since the Project would not generate a demand for domestic water that would be greater than the demand generated by 500 residential units. In addition, as the Project is not a residential subdivision and is located within an urbanized area, the Project is not subject to the requirements of SB 221.

(c) California Code of Regulations

California Code of Regulations Title 20, Chapter 4, Article 4, Section 1605 establishes water efficiency standards (i.e., maximum flow rates, maximum gallons per flush) for all new plumbing fittings and fixtures (e.g., showerheads, sink faucets, water closets, urinals), and Section 1608 prohibits the sale of fixtures that do not comply with the regulations.

(d) Global Warming

Although experts generally agree that Earth's atmosphere has warmed over the last century and will likely continue to warm in the future, there is substantial uncertainty as to how this warming will quantitatively affect future water supplies, and specifically, how this warming will affect SWP supplies.

(i) Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger issued Executive Order S-3-05, and established greenhouse gas emissions targets for California and required biennial

reports on potential climate change effects on several areas, including water resources. The potential effects of increasing atmospheric concentrations of carbon dioxide and other 'greenhouse gases' and the observed increase in the average temperature of the Earth's atmosphere and oceans have been the subject of considerable technical analysis and political debate. The natural phenomena (e.g., temperature, rainfall) that together form the climate of a particular region vary from day-to-day and year-to-year. The variation in climate can be a result of natural, internal processes or in response to external forces from both human and non-human causes, including solar activity, volcanic emissions, and greenhouse gases.

(ii) Global Warming Solutions Act of 2006

The Global Warming Solutions Act of 2006 (Health and Safety Code Sections 38500 *et seq.*), also known as Assembly Bill (AB 32), requires the California Air Resources Board (CARB) to adopt regulations requiring monitoring and annual reporting of greenhouse gas emissions from the most important sources or categories of sources. By January 1, 2011, CARB must establish greenhouse gas emissions limits and emission reduction measures necessary to achieve the 1990 levels by 2020. It is therefore anticipated that California agencies will more precisely quantify impacts of climate change in various regions of the State and that DWR will formalize anticipated effects of climate change on water supply. Once DWR provides this assessment, it may be used by local water agencies to determine to what extent the supplies will be affected by global climate change impacts. As DWR develops more specific assessments of the potential effects of climate change on State Water Project delivery reliability and water demands, local purveyors can update their plans accordingly.

(iii) Department of Water Resources (DWR)

The DWR is the state agency charged with the statutory responsibility to build, manage, and operate the State Water Project.

The *2005 State Water Project Delivery Reliability Report* addressed the need to incorporate some of the uncertainties of global warming with regard to planning and operation of the State Water Project, and stated that, "Until the impacts of climate change on precipitation and runoff patterns in California are better quantified, future weather patterns are usually assumed to be similar to those in the past, especially where there is a significant historical rainfall record." As mentioned above, recent drought years and USFWS biological opinions have reduced water available to California.

In June 2006, DWR published a Technical Memorandum Report entitled *Progress on Incorporating Climate Change into Planning and Management of California's Water Resources* in response to Executive Order S-3-05. The Report describes progress made

incorporating climate change into existing water resources planning and management tools and methodologies. Some preliminary results on the potential effects of climate change are presented. While the analyses presented in the Technical Memorandum Report used the most current scientific techniques and were reviewed by experts, all of the results are preliminary. The Technical Memorandum Report incorporates several assumptions, reflects a limited number of climate change scenarios, and does not address the likelihood of each scenario. Policy implications of climate change and recommendations to respond to the future demands for water are identified as beyond the scope of the Technical Memorandum Report. The Technical Memorandum Report acknowledges that there are substantial uncertainties regarding the effects of global warming on State Water Project supplies and suggests additional analysis to reduce this uncertainty.

Regarding the purpose and use of the Technical Memorandum Report in the analysis of climate change, the Technical Memorandum Report states that:

> "The purpose of this report is to demonstrate how various analysis tools currently used by DWR could be used to address issues related to climate change. The methods and results presented in this report could be used to guide future climate change analysis and to identify areas where more information is needed. All results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

It is therefore premature to make an assessment of how, for example, snow melt will affect water availability. It is noted that increased use of groundwater storage is a potential strategy identified in the referenced Technical Memorandum Report to mitigate potential impacts of global warming.

DWR is actively engaged in developing a set of water management policies that will provide a comprehensive approach to climate change. The science regarding global warming is still evolving and policy recommendations on how to incorporate potential changes to water supply due to climate change are being developed. However, the importance of conservation and maintaining a reliable water supply in the context of global warming is recognized by DWR and water planners.

(2) Regional Level

(a) Metropolitan Water District

As mentioned above, the MWD has faced recent challenges in water supply delivery, including drought conditions and recent litigation regarding the Delta smelt,

including reductions in water delivery from the SWP to the MWD. Based on the water supply planning requirements imposed on its member agencies and ultimate customers, such as the requirements to adopt UWMPs, water supply assessments and written verifications, MWD has adopted a series of official reports on the state of its water supplies. As described further below, in response to recent developments in the Delta, MWD is engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies. MWD will continue to rely on the plans and policies outlined in its *Regional Urban Water Management Plan, Integrated Resources Plan, Water Surplus and Drought Management Plan*, *Water Supply Allocation Plan, , and Five Year Supply Plan* to address water supply shortages and interruptions (including potential shut downs of SWP pumps) to meet water demands. These plans are described in detail below.

(i) MWD 2005 Regional Urban Water Management Plan (RUWMP)

Pursuant to the Urban Water Management Planning Act, MWD prepared the 2005 Regional Urban Water Management Plan (RUWMP), which addresses the future of MWD's water supplies and demand through the year 2030. Campaigns for voluntary conservation, curtailment of replenishment water and agricultural water delivery are some of the actions outlined in the RUWMP to meet future water demand. If necessary, reduction in municipal and industrial water use and mandatory water allocation could be implemented. The RUWMP incorporates many of the actions and policies provided in MWD's *Water Surplus and Drought Management Plan* and *Integrated Resources Plan.*

(ii) MWD Integrated Resources Plan

MWD first adopted its Integrated Resources Plan (IRP) in 1996. The IRP is updated every five years. The most updated IRP, which was adopted in 2004, discussed local water supply initiatives (e.g., local groundwater conjunctive use programs) and established a buffer supply to mitigate against the risks associated with implementation of local and imported water supply programs. The 2004 IRP noted that future water supply reliability depends not only upon actions by MWD to secure reliable imported supplies, but also further development of local projects by local agencies. MWD supported this conclusion by providing detailed updates for each of its resource categories, restating dry year IRP targets and examining current considerations, changed conditions, implementation strategies and identified programs, implementation challenges and cost information.

MWD is currently updating the 2004 IRP and has released a draft version of the 2010 IRP.[14] The updated IRP addresses existing and new challenges such as the

[14] *Metropolitan Water District, Integrated Resources Plan, http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/; accessed September 17, 2010.*

continued drought conditions as well as Delta smelt litigation and climate change. As can be seen by these ongoing studies, MWD is continually updating its plans to meet ever-changing challenges to its water supplies.

(iii) MWD Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water shortage contingency analysis that is required as part of any urban water management plan into a separate, more detailed plan, called the Water Surplus and Drought Management Plan (WSDM). That plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's Integrated Resources Plan. The WSDM Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The WSDM Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water, first inside then outside of the region.

The shortage actions of the WSDM Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories. Under Shortage conditions, MWD may make withdrawals based on location and ability to access and interrupt groundwater replenishment deliveries. Under Severe Shortage conditions, MWD will call for extraordinary drought conservation, reduce agricultural water deliveries, exercise available options for water transfers and seek other water purchases. Under Extreme Shortage conditions, MWD will allocate or reduce water deliveries to its member agencies.

Additionally, the MWD announced a strategic approach in 2008 regarding its WSDM Plan. MWD's major strategies are as follows:

- Continue conservation campaign;
- Maximize recovery of water from Central Valley storage and banking programs;
- Purchase additional supplies to augment existing supplies; and
- Develop and implement a shortage allocation plan (discussed below).

(iv) MWD Water Supply Allocation Plan.

While the WSDM included a set of general actions and considerations for MWD staff to address during shortage conditions, it did not include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted a water supply plan called the WSAP in February 2008. This plan includes a formula for determining reductions of water

deliveries to member agencies during extreme water shortage in MWD's service area conditions (i.e., drought conditions or unforeseen cuts in water supplies). The formula was derived for three scenarios of regional water shortage levels (10, 20, and 40 percent shortage) and is based on a methodology that cuts water allocations all across the board (i.e., to all member agencies) with adjustments for the member agency's dependency on MWD's water supplies and the agency's water conservation savings from programs and devices. The formula also calls for Interruptible Agricultural Water Program I water reductions of between 30 to 100 percent, depending on the severity of the shortage conditions. The allocation period covers 12 months from July of a given year through the following June. Member agency allocations would be enforced through a penalty rate structure.

Relative to a member agency's preferential water rights, the WSAP provides for a discounted penalty rate schedule for member agencies exceeding their allocations under the plan's formula but not exceeding their preferential rights. The WSAP would be reviewed and revised in three years following the February 2008 adoption as well as 12 months after a shortage.[15]

(v) MWD Five Year Supply Plan

In April 2008, MWD staff began working with MWD's member agencies on a Five Year Supply Plan (Supply Plan) to identify specific resource and conservation actions over the next five years to manage water deliveries under continued drought conditions and court ordered restrictions. The Supply Plan focuses on the following six categories of resource options to improve MWD's reliability over the next five years: water conservation, Colorado River Transactions, Near Term Delta Actions, SWP Transactions, Groundwater Recovery, and local resources. MWD's estimate of the dry year yield of the Supply Plan actions would be approximately 553,000 AF in 2009, increasing up to 703,000 AF in 2013.

(3) City Level

(a) LADWP 2005 Urban Water Management Plan

In accordance with the California Urban Water Management Planning Act, the LADWP has prepared the 2005 UWMP. The 2005 UWMP details the LADWP's efforts to

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[15] *In April 2008, the Central Basin Municipal Water District filed a lawsuit to overturn the Water Supply Allocation Plan on the basis that it was unequitable and was not subject to environmental review. MWD has filed the administrative record, which Central Basin moved to strike and is preparing to file appropriate responses. The litigation is pending. Despite this litigation, the MWD intends to continue implementing the plan.*

promote the efficient use and management of its water resources. LADWP's UWMP used a service area-wide method in developing its water demand projections. This methodology does not rely on individual development demands to determine area-wide growth. Rather, the growth in water use for the entire service area was considered in developing long-term water projections for the City of Los Angeles through the year 2030.

As previously stated, the UWMP is required to be updated every five years. LADWP is currently in the process of updating its UWMP. In the new 2010 UWMP, the LADWP will develop a revised demand forecast that will factor in the water demand for which all water supply assessments have been prepared in addition to future demands. Water supply planning will be based on meeting these long-term demands.

(b) LADWP's Securing L.A.'s Water Supply

In May 2008, the City of LADWP published a Water Supply Action Plan, "Securing L.A.'s Water Supply," which provides a blueprint for creating sustainable sources of water for the future of Los Angeles through the year 2030. It is an aggressive multi-pronged approach that relies on a set of both short-term and long-term strategies to secure the City's water future. The Plan includes: investments in state-of-the-art technology; a combination of rebates and incentives; the installation of smart sprinklers, efficient washers and urinals; and long-term measures such as expansion of water recycling and investment in cleaning up the local groundwater supply. The premise of the Water Supply Action Plan is that the City will meet all new demand for water (about 100,000 acre-feet per year) through a combination of water conservation and water recycling. Specifically, by the year 2019, half of all new demand will be filled by a six-fold increase in recycled water supplies, and by 2030 the other half will be met through increased conservation efforts. In total, the City anticipates that the plan will conserve or recycle 32.6 billion gallons of water a year.

The plan also addresses current and future SWP supply shortages. The DWR anticipates that the December 15, 2008 USFWS Biological Opinion on Delta Smelt will limit MWD exports of their anticipated SWP supply by up to 50 percent in a normal water year. However, the Action Plan concludes that MWD's actions in response to this threat will ensure continued reliability of its water deliveries.

(c) City of Los Angeles Municipal Code

As a result of aggressive long-term conservation measures, L.A.'s water demand today is about the same as it was 25 years ago, despite a population increase of approximately one million people. LADWP projects water demand within its service area to reach approximately 776,000 acre-feet by 2030, assuming an average year, and approximately 813,000 acre-feet by 2030, assuming a single dry year. Based on existing and potential water supplies from local groundwater basins, the Los Angeles Aqueduct

system, water purchased from MWD, and other planned sources, as well as existing and planned conservation and reclaimed water efforts, LADWP expects to be able to provide approximately 897,200 acre-feet of water in 2030 assuming an average year, or approximately 934,200 acre-feet of water in 2030, assuming a single dry year.

To achieve these goals, the City has adopted several ordinances in the LAMC in an effort to reduce water consumption. Specifically, the City of Los Angeles Plumbing Code (Chapter IX, Article 4, of the LAMC) incorporates by reference the California Plumbing Code. As previously described, maximum flow rates for water fixtures are established under the California Plumbing Code. Ordinance No. 180,822 was recently adopted and establishes water efficiency requirements for new development and renovation of existing buildings and mandates installation of high efficiency plumbing fixtures in residential and commercial buildings. In addition, City Ordinance No. 163,532 (Chapter XII, Article IV, of the LAMC) requires a 10 percent reduction in irrigation for large turf areas (three acres of turf or greater), among other water-conserving measures.

Moreover, LAMC Sections 122.00–122.10 (Water Closet, Urinal and Showerhead Regulations) 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. In addition, there are provisions requiring xeriscaping (i.e., the use of low-maintenance, drought-resistant plants).

Additionally, in response to recent water supply shortages, the City has recently begun enforcement of prohibited water uses as defined in the City's Emergency Water Conservation Plan Ordinance (Chapter XIII, Article I, LAMC Sections 121.00-121.13). The ordinance sets forth six different phases of water conservation, which shall be implemented based on water conditions. In determining which phase of water conservation shall be implemented, LADWP will monitor and evaluate the projected water supply and demand by its customers on a monthly basis, and will recommend to the Mayor and City Council the extent of the conservation required. The Mayor will, in turn, independently evaluate such recommendation and notify the Council of the Mayor's determination as to the particular phase of water conservation that should be implemented.

With respect to landscaping, Ordinance No. 170,978 approved on April 3, 1996, established consistent landscape standards and requirements for water conservation applicable to specified projects, and restricts the issuance of building permits, grading permits, and land use permits to projects which are determined to be in compliance with the ordinance. However, as cemeteries are specifically exempted from the provisions of this ordinance in Section 12.40.C.7, it would not apply to the proposed Project.

2. Environmental Impacts

a. Methodology

This section identifies the potential impacts on water supply and on-site water supply and distribution systems resulting from the build-out of the proposed Project. The water distribution and supply system was evaluated by determining the existing physical features and capacities of the system. Information was obtained from the LADWP as needed to define the existing system's capacities to deliver water to the Project Site.

The future daily water demand flows for the Project were determined based on the Project Site's current water consumption rates, which were applied to the future on-site conditions. As the proposed Project's uses would be a continuation and expansion of the existing cemetery use on the Project Site, the use of the current water consumption rates was appropriate for determining the Project's net increase in water demand. It is important to note that this analysis is conservative in that it does not take into account that when compared to the existing occupied floor area, the new occupied floor area would incorporate low-flow water fixtures, which would utilize less water. As such, the average daily demand would likely be less than presented above.

Based on the future projected water demand for the proposed Project, the existing LADWP and on-site water systems, including planned LADWP improvements, were assessed to determine whether they could meet the projected future demand of the proposed Project.

b. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to water. These questions are as follows:

Would the project:

- Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?
- Have sufficient water supplies available to service the project from existing entitlements and resources, or are new or expanded entitlements needed?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide (2006)* states that the determination of significance shall be made on a case-by-case basis, considering the following factors:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

Based on these factors, the proposed Project would have a significant impact if water distribution capacity would be inadequate to serve the proposed use after appropriate infrastructure improvements have been installed or the City's water supplies would not adequately serve the proposed Project.

c. Project Design Features

To reduce on-site water consumption, the proposed Project would incorporate project design features (PDFs) to reduce on-site water consumption and ensure adequate supply infrastructure. These PDFs are considered in the analysis of the proposed Project's potential impacts on water consumption. These PDFs include:

Project Design Feature K-1 The Project will reduce the rate of water use compared to existing operations by at least 10 percent over the life of the Project. Reduction measures may include: education on water conservation; use of high efficiency irrigation systems, such as weather-based irrigation controllers with rain shutoff technology or SMART irrigation controllers; hydro-zoning; or use of native/drought resistant plant materials in areas of the park not used for interments or services.

Project Design Feature K-2 The Project Applicant would make all necessary on-site improvements to the domestic and recycled water delivery infrastructure to ensure adequate water supply on the Project Site.

d. Project Impacts

Implementation of the proposed Project would result in the development of approximately 22,500 square feet of new occupied floor area for cemetery-related land uses. As discussed in Section II, Project Description, of this Draft EIR, this new occupied floor area would include 13,089 square feet of the administration building addition, an approximately 5,000-square-foot crematory, and an approximately 4,400-square-

footchapel. Additionally, the proposed Project would increase the landscaped area of the Project Site by approximately 94 acres. As discussed in greater detail below, the new occupied floor area is anticipated to result in a net increase in the demand for domestic water by 4,815 gpd, while the 90 acres of landscaped area are anticipated to increase the demand for recycled water by approximately 270,000 gpd.

(1) Construction Impacts

No significant increase in water demand is anticipated as a result of the Project's construction activities. The construction of the Project would include all necessary on- and off-site water pipe improvements and connections to adequately link the Project to the existing LADWP water systems. As mentioned above, the LADWP is designing a potable water trunk line to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure. As such, it is anticipated that the only off-site improvements to the water delivery infrastructure would be those necessary to connect the on-site water delivery system to the new water main. During this connection, Project construction impacts (street, traffic detouring and control, and impacts to other utilities) would be confined to trenching for the connector water main and physically establishing the connection to the water main. The proposed Project's construction impacts relative to vehicular and pedestrian access associated with the installation of the proposed new connection lines would be temporary and would cease upon completion of the connection to the LADWP water main. Additionally, although the installation of this connection line may require traffic lane closures, a single lane of traffic in each direction, as well as access to the Project Site and surrounding properties, would be maintained at all times during construction. Therefore, Project construction would result in a less than significant impact with respect to the installation of the water delivery infrastructure.

(2) Domestic Water Demand

Implementation of the proposed Project would result in the development of approximately 22,500 square feet of new occupied floor area of cemetery-related land uses. Based on the derived demand rate on the site history for domestic water usage outlined above (approximately 214 gpd per 1,000 square feet), implementation of the proposed Project would result in an increased demand on domestic water supply services of approximately 4,815 gpd. This would represent an approximate 21 percent increase in the domestic water demand as compared to the estimated baseline conditions. A discussion of the proposed Project's increased demand for recycled water is found below. As mentioned above, it is important to note that this analysis is conservative in that it does not take into account that when compared to the existing occupied floor area, the new occupied floor area would incorporate low-flow water fixtures, which would utilize less water. As such, the average daily demand would likely be less than presented above.

The proposed Project involves the expansion of an existing cemetery and does not involve the construction of any housing units or any other non-cemetery related uses. As such, the proposed Project is consistent with the underlying zoning designation of the Project Site and is consistent with the Southern California Association of Government's 2004 demographic projections, on which the 2005 UWMP was based. As concluded in the 2005 UWMP, based on existing and potential water supplies from local groundwater basins, the LAA system, water purchased from the MWD, and other planned sources, as well as existing and planned conservation and reclaimed water efforts, LADWP expects to meet the potable water demands for the City of Los Angeles and its outlying service areas through the year 2030. Therefore, adequate water supply exists to serve the Project increased demands.

Pursuant to the requirements set forth in SB 610 and SB 221, the proposed Project does not include any of the types of development which are required to obtain a Water Supply Assessment (listed above under Regulatory Setting). Specifically, the proposed Project does not include a subdivision map approval, residential development, or a hotel or motel, and would not generate increased demand for water that is equal to or equivalent to a 500-dwelling unit project (estimated to be 150 to 250 acre-feet per year). Further, the proposed Project does not include a shopping center, business establishment, or commercial office building, and does not include industrial, manufacturing, a processing plant or industrial park, and is not a mixed-use project. Therefore, a Water Supply Assessment is not required and a less than significant impact with respect to domestic water supplies would result.

Nevertheless, due to statewide drought conditions, the LADWP recommends that water should be conserved at all times, because efficient use of water allows increased water for use in dry years and makes water available for beneficial environmental uses. As such, the proposed Project would include the installation of recommended water conservation features, such as low-flow toilets, and urinals in all restroom areas. In addition, the use of recycled water for landscape irrigation would continue under the proposed Project. As such, irrigation required for the Project's new landscaped areas would not increase the on-site demand for domestic water supplies.

(3) Recycled Water Demand

The proposed Project will result in an increased demand on recycled water supply for the maintenance and operation of the proposed Project. Based on the current use of recycled water across the Project Site, the irrigation demands for the property are approximately 3,000 gpd per acre. Under the proposed Project, the developed and landscaped areas of the Project Site would increase by approximately 94 acres, increasing the irrigation demands by approximately 282,000 gpd. As mentioned above, since the proposed Project would utilize reclaimed water for its irrigation needs, water demands for

irrigation purposes would not place additional demands upon the City's domestic water supply and water demand impacts would be less than significant.

(4) Domestic and Recycled Water Infrastructure

As discussed above, the Applicant has existing on-site private potable and reclaimed water storage and pumping facilities. As an Interim Project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. This project was permitted in 2007 and is planned to be completed in early 2011. In addition, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. Until the new trunk line is installed and a connection provided to the Project Site, the Applicant will continue to receive water from the existing water distribution system and pressurize the water for distribution and use on-site. Water system upgrades in connection with the Project would expand the existing on-site private potable and reclaimed water systems to new areas of the cemetery as they are developed through the installation of new on-site domestic and recycled water lines and connections to existing lines. Pursuant to PDF K.2-2 above, the Project will include all necessary on-site improvements to the domestic and recycled water delivery infrastructure to ensure adequate water supply on the Project Site. As a result, the proposed Project's impacts to the local domestic and recycled water delivery infrastructure would be less than significant and no mitigation measures are required.

(5) Water Treatment Infrastructure

As mentioned above, domestic water to the Project Site is primarily provided by the Los Angeles Aqueduct Filtration Plant, which has the capacity to treat 600 million gallons per day from the Los Angeles Aqueducts. The average plant flow is approximately 450 million gallons per day during the non-summer months and 550 million gallons per day during the summer months, and thus operates at between 75 and 92 percent capacity. As such, even during the summer months, the Los Angeles Aqueduct Filtration Plant has an excess capacity of 50 million gallons per day. In addition to the Los Angeles Aqueduct Filtration Plant, which receives water from the Los Angeles Aqueduct, water within the North Hollywood area of the City of Los Angeles is also provided by the MWD. The MWD, which provided approximately two-thirds of the potable water demand for LADWP in 2009, treats its own water via three water filtration plants that it owns and operates. In addition, as mentioned above, the North Hollywood Pump Station treats a small amount of groundwater for distribution throughout the Project Site vicinity. Collectively, these water treatment facilities are used to meet the potable water demand for the City. The proposed Project's net increase in potable water demand of 4,815 gpd represents less than 0.01 percent of the total treatment capacity of the Los Angeles Aqueduct Filtration Plant alone.

Further, the Project's net increase in potable water demand also represents approximately 0.01 percent of the total remaining available capacity at the Los Angeles Aqueduct Filtration Plant during the peak summer months. As such, the Los Angeles Aqueduct Filtration Plant has adequate available capacity to treat the domestic water needed for the proposed Project. Additionally, as indicated by the LADWP, the North Hollywood Pump Station is expected to have adequate capacity to accommodate the proposed Project's net increase in water consumption.[16] As such, LADWP treatment facilities would have adequate capacity to serve the net increase in domestic water demand under the proposed Project and no new or expanded water treatment plant facilities would be required. Furthermore, as discussed above, reclaimed water would continue to be used on landscaped portions of the Forest Lawn – Hollywood Hills property, reducing the demand for domestic water. Therefore, the proposed Project would result in a less than significant impact with respect to the potable water treatment infrastructure and no mitigation measures are required.

3. Cumulative Impacts

In terms of the City's overall water supply, the water demands for projects that are consistent with the City's General Plan have been taken into account in the 2005 UWMP. For projects that are not consistent with the General Plan or that meet the requirements established in Sections 10910-10915 of the State Water Code, a Water Supply Assessment demonstrating sufficient water availability exists to serve the project would be required on a project-by-project basis. LADWP's 2005 UWMP projects yearly water demand to reach 776,000 acre-feet by 2030, or an increase of 17 percent from 2005. Water demand projections in 5-year increments through 2030 are available in the 2005 UWMP for each of the major customer classes – namely single family, multi-family, commercial, governmental, and industrial. Demographic data from the Southern California Association of Government's 2004 Regional Transportation Plan as well as billing information for each major customer class, weather, and conservation were factors used in forecasting future water demand growth. It is anticipated that the projected water supplies during normal, single-dry, and multiple-dry water years as included in the 20-year projection contained in its UWMP will meet the expected water demands associated with the proposed Project in addition to the demands of current and future related projects.

Additionally, the proposed Project's net increase potable water demand of 4,815 gpd represents less than 0.01 percent of the total treatment capacity and only 0.01 percent of the remaining available capacity of the Los Angeles Aqueduct Filtration Plant alone.

[16] *Letter correspondence from Charles C. Holloway, Manager of Environmental Assessment, Los Angeles Department of Water and Power, September 25, 2008.*

Therefore, the Los Angeles Aqueduct Filtration Plant would have adequate capacity to treat the water demanded by the proposed Project and related projects. Further, the potential need for the related projects to upgrade water lines to accommodate their water needs is site-specific and there is little, if any, cumulative relationship between the development of the proposed Project and the related projects. Therefore, no cumulative water infrastructure impact or water treatment facilities impacts are anticipated from the development of the proposed Project and the related projects. Cumulative impacts to water service and regional supplies would be less than significant.

4. Mitigation Measures

As discussed above, the proposed Project would result in less than significant impacts related to water supply and infrastructure. As such, no mitigation measures are required.

5. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in water demand to a point where the existing water delivery infrastructure or the available water supply would not be able to accommodate the proposed Project. As such, the potential impacts upon the local water delivery infrastructure and available supplies would therefore be less than significant and no mitigation measures are required.

IV. Environmental Impact Analysis

K.3 Public Utilities – Energy

This Section describes the natural gas and electricity infrastructure that currently serves the Project Site and surrounding area, assesses potential impacts associated with the Project on this infrastructure, and identifies the need for improvements in order to serve the Project and related development, if needed.

1. Environmental Setting

a. Regional Existing Conditions

(1) Electricity

The City of Los Angeles Department of Water and Power (LADWP) provides electricity service to the City of Los Angeles. The LADWP obtains electricity from various generating sources that utilize coal, nuclear, natural gas, hydroelectric, and renewable resources to generate power. Major power generating sources for the LADWP include the following: four municipally-owned power plants within the Los Angeles Basin; LADWP Hydrogenerators on the Los Angeles Aqueduct; shared-ownership generating facilities in the Southwest; and purchases of power from the Southwest and Pacific Northwest regions. In 2006, 21 percent of LADWP's generation capacity was from coal-fueled units; 47 percent was from natural-gas-fueled units; 23 percent came from large hydroelectric sources; 5 percent came from nuclear sources; and 4 percent from eligible renewable energy sources.[17] Although these figures represent the generation capacity of each fuel type, the actual percentage of total 2006 electricity generated by each fuel type was as follows; 47 percent from coal-fueled units; 30 percent from natural-gas-fired units; 8 percent from large hydroelectric sources; 8 percent from nuclear sources; and 7 percent from eligible renewable sources.[18] The LADWP supplies power to the Project Site through the Los Angeles transmission system, which similarly derives power from as many as 25 different electric generation plants located both within and outside southern California. In 2006, the

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[17] *City of Los Angeles Department of Water and Power. 2007 Final Integrated Resources Plan. December 2007. Available at: http://www.ladwp.com/ladwp/cms/ladwp005148.jsp. Accessed June 25, 2010.*

[18] *Ibid.*

LADWP delivered a total of 24,313.51 million kilo-watt hours (kWh) of electricity to its consumers.[19] The LADWP projects that electricity consumption within LADWP's service territory will increase at an average rate of 0.9 percent, or 218.82 million kWh per year for the foreseeable future.[20]

(2) Natural Gas

The State of California produces about 13.5 percent of the natural gas it uses.[21] The remaining 86.5 percent is obtained from sources outside of the state: 40 percent from the Southwest, 23.5 percent from Canada, and 23 percent from the Rocky Mountain area. An interstate natural gas pipeline system delivers out-of-state natural gas to California.[22] The five major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, and Mojave Pipeline.[23] However, the availability of natural gas is based upon changing conditions of gas supply and regulatory policies.

The Southern California Gas Company provides natural gas to the City of Los Angeles through existing gas mains located under the streets and public right-of-ways. Natural gas service is provided in accordance with the Southern California Gas Company's policies and extension rules on file with the California Public Utilities Commission at the time contractual agreements are made. As a public utility, the Southern California Gas Company is under the jurisdiction of the Public Utilities Commission, but can also be affected by the actions of federal regulatory agencies.

b. Existing Conditions on the Project Site

(1) Electricity

The proposed Project is located within a developed, urbanized area where facilities currently exist to serve the Project Site and surrounding areas. The Project Site is served

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[19] *California Energy Commission, Electricity Consumption by Entity, LADWP, All Users. Available at: http://www.ecdms.energy.ca.gov/elecbyutil.aspx. Accessed June 29, 2010.*

[20] *LADWP. 2007 Final Integrated Resources Plan. December 2007. Available at: http://www.ladwp.com/ladwp/cms/ladwp005148.jsp. Accessed June 25, 2010.*

[21] *California Energy Commission. Overview of Natural Gas in California. Available at: http://energyalmanac.ca.gov/naturalgas/overview.html. Accessed June 25, 2010.*

[22] *Ibid.*

[23] *Ibid.*

via LADWP distribution circuits. An overhead 34.5-kilovolt (kV) transmission line is adjacent to the Project Site running along Forest Lawn Drive and currently supplies 4,800 volts to the Project vicinity, including the Forest Lawn – Hollywood Hills property. An existing LADWP power line easement traverses the Project Site from northwest to southeast.

The Project Site is currently developed with structures including an administration office, mortuary, and flower shop, a chapel, a storage building, a garage and maintenance buildings, the Church of the Hills, the Cremation Garden Columbaria, the Hall of Liberty Auditorium and Museum, Old North Church, outdoor mausoleums, and lighting associated with statues and monuments, as well as landscaping and paved roadways. The existing occupied structures are currently served by electricity and natural gas lines. Existing electricity consumption at the Project Site from 2004 to 2009 ranged from 1,944,800 kWh per year to approximately 2,476,951 kWh per year (see Table IV.K-5 on page IV.K-46). The six-year annual average electricity demand of 2,225,663 kWh divided by the square feet of occupied floor area yields an existing electricity demand of approximately 22.55 kWh per year per square foot. Based upon this rate, the Interim Projects would be anticipated to consume approximately 196,704 kWh per year. When added to existing electrical consumption, total baseline consumption would be 2,422,367 kWh per year.

(2) Natural Gas

Natural gas is provided to the Project Site via an existing pipeline infrastructure serving the Project area. As shown in Table IV.K-6 on page IV.K-46, existing natural gas usage from 2004 to 2009 ranged from 3,424,900 to 7,532,600 cubic feet. The six-year annual average natural gas usage of approximately 5,325,417 cubic feet, divided by 98,679 square feet of existing occupied square feet yields an average annual natural gas usage of 53.97 cubic feet of natural gas per square foot of occupied floor area. Based on this rate, Interim Projects would be anticipated to demand an additional 470,780 cubic feet per year. As such the total baseline demand for natural gas would be approximately 5,796,197 cubic feet per year or approximately 483,016 cubic feet per month.

c. Regulatory Framework

(1) Assembly Bill 32

Assembly Bill 32 (AB 32), also known as the California Global Warming Solutions Act of 2006, commits the State to achieving the following:

- 2000 GHG emission levels by 2010 (which represents an approximately 11 percent reduction from business-as-usual); and

Table IV.K-5
Six-Year History of Utility/Electricity Usage

Year	Annual Electricity Demand (kWh/yr)
2004	2,433,065
2005	2,476,951
2006	2,224,000
2007	2,043,400
2008	1,944,800
2009	2,231,760
Six-Year Average	**2,225,663**

Source: Forest Lawn Memorial-Park Association, July 26, 2010.

Table IV.K-6
Six-Year History of Utility/Natural Gas Usage

Year	Annual Natural Gas Demand (cubic feet)
2004	7,532,600
2005	6,143,700
2006	5,392,700
2007	5,242,500
2008	4,216,100
2009	3,424,900
Six-Year Average	**5,325,417**

Source: Forest Lawn Memorial-Park Association, July 26, 2010.

- 1990 levels by 2020 (approximately 28.4 percent below business-as-usual).

To achieve these goals, AB 32 tasked the California Public Utilities Commission and California Energy Commission with providing information, analysis and recommendations to the California Air Resources Board (CARB) on ways to reduce greenhouse gas (GHG) emissions in the electricity and natural gas sectors.

(2) Title 24 of the California Code of Regulations

Energy consumption by new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (Title 24). 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 these standards meet or exceed those provided in Title 24 guidelines.

Chapter 13 of the Los Angeles Building Code deals with energy efficiency. As stated in the Building Code, "In order to comply with the purpose of this Chapter, buildings shall be designed to comply with requirements of Part 6, Title 24 of the California Building Standards Code - California Energy Code, 1998 Edition."

(3) Western Electricity Coordinating Council and the North American Electric Reliability Council

The Western Electricity Coordinating Council (WECC) is a voluntary consortium of electrical power providers that is responsible for coordinating and promoting electricity reliability from Alberta and British Columbia in the north of its jurisdiction to northern Baja California in the south of its jurisdiction and the 14 western states in between. The LADWP is a member of the Western Electricity Coordinating Council. The Western Electricity Coordinating Council has implemented Standard BAL-STD-002-0 to require reliable operation of the interconnected power system while ensuring adequate generating capacity is available at all times to account for varying demands and avoid loss of firm load following transmission or generation contingencies. As a means of ensuring power system reliability, LADWP maintains an extra reserve margin of power generation resources that could be used in the event of a power system disturbance. In order to determine how much extra generation reserves are needed, LADWP adheres to the Western Electricity Coordinating Council Reliability Standard. Specifically, WECC Standard BAL-STD-002-0 requires its providers to:

1. Supply requirements for load variations;

2. Replace generating capacity and energy lost due to forced outages of generation or transmission equipment;

3. Meet on-demand obligations; and

4. Replace energy lost due to curtailment of interruptible imports.

(4) City of Los Angeles Green Building Standards

In April 2008, the City of Los Angeles adopted Ordinance 179,820 establishing a Green Building Program. Ordinance 179,820 became effective on May 29, 2008 and amended the Los Angeles Municipal Code to add Sections 16.10 and 16.11, establishing a Green Building Program to reduce the use of natural resources, create healthier living environments and minimize the negative impacts of development on local, regional, and global ecosystems. The program applies to the following categories of Projects:

1. A new non-residential building or structure of 50,000 gross square feet or more of floor area; or

2. A new mixed use or residential building of 50,000 gross square feet or more of floor area in excess of six stories; or

3. A new mixed use or residential building of six or fewer stories consisting of at least 50 dwelling units in a building, which has at least 50,000 gross square feet of floor area, and in which at least 80 percent of the building's floor area is dedicated to residential uses; or

4. The alteration or rehabilitation of 50,000 gross square feet or more of floor area in an existing non-residential building for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building; or

5. The alteration of at least 50 dwelling units in an existing mixed use or residential building, which has at least 50,000 gross square feet of floor area, for which construction costs exceed a valuation of 50 percent of the replacement cost of the existing building.

The proposed project includes the expansion of an existing cemetery, resulting in the development of approximately 22,500 square feet of new occupied floor area. As such, the Green Building Ordinance does not apply to the proposed Project.

2. Environmental Impacts

a. Methodology

The Forest Lawn Memorial-Park Association maintains records of the total on-site annual electricity and natural gas demand. To determine the electricity and natural gas demand per square foot of floor area, the average electricity and natural gas demand over the 2004–2009 period was divided among existing on-site occupied floor area. The resulting electricity and natural gas demand rate was then applied to the Project's proposed development to estimate the Project's future electricity and natural gas consumption. The

proposed Project's anticipated electricity and natural gas consumption were then compared to LADWP and The Gas Company's existing and planned energy supplies and delivery infrastructure in 2050 to determine if these two energy utility companies would be able to accommodate the proposed Project's energy consumption. Additionally, LADWP and The Gas Company were consulted to determine if adequate infrastructure would exist to accommodate the proposed Project's energy demand. Where Project impacts would exceed the capacity of the existing distribution system, mitigation measures have been recommended in this section to mitigate those impacts.

b. Thresholds of Significance

Appendix F of the CEQA Guidelines states that the potentially significant energy implications of a project should be considered in an EIR. Environmental impacts may include:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies on and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources;
- The Project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

In the context of these guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that a determination of significance relative to energy consumption shall be made on a case-by-case basis, considering the following factors:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities;
- Whether and when the needed infrastructure was anticipated by adopted plans; and

- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

Based on all of these factors, the Project would have a significant impact if:

- The Project would result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities.
- The design of the Project fails to incorporate energy conservation measures under Title 24 of the California Code of Regulations.

c. Project Design Features

To reduce on-site electricity and natural gas consumption, the proposed Project would incorporate project design features (PDFs) to reduce on-site electricity and natural gas consumption and ensure adequate supply infrastructure. These PDFs are considered in the analysis of the proposed Project's potential impacts on electricity and natural gas demand. These PDFs include:

Project Design Feature K-3: The Applicant shall submit electrical drawings and load schedules to the Los Angeles Department of Water and Power (LADWP) for review prior to the start of construction. The Applicant shall be responsible for the installation of required infrastructure improvements and associated pro-rata share financial contributions towards improvements needed to serve the proposed Project.

Project Design Feature K-4: The Applicant shall meet or exceed all Title 24 energy conservation requirements as they apply in the City of Los Angeles.

Project Design Feature K-5: The Project will reduce electricity needs for new facilities associated with the Project by at least 10 percent from current rates associated with existing facilities. Energy conservation measures may include: education on energy conservation; energy efficient lighting; use of solar panels; or participation in LADWP's Green Power Program.

d. Project Impacts

Implementation of the proposed Project would result in the development of approximately 22,500 square feet of new occupied floor area of cemetery-related land uses. As discussed in Section II, Project Description, of this Draft EIR, this new occupied floor area would include 13,089 square feet of the administration building addition, an approximately 5,000-square-foot crematory, and an approximately 4,400-square-foot Chapel.

(1) Construction

During the construction phase, existing electrical and natural gas service equipment would be relocated and reconfigured on-site as part of the overall site improvement plan. Additional electrical conduits, wiring, and associated infrastructure would be installed. Infrastructure required for natural gas service would also be installed. All improvements to the electrical and natural gas infrastructure, including a potential new on-site electrical transformer, would occur on-site. No utility outages are expected when hooking up the proposed Project, but a short outage is possible. In the unlikely event that service disruption does occur, it would be for a short duration. No roadway closures or access restrictions would be required during the implementation of upgrades to the electricity or natural gas distribution systems. Therefore, utility impacts during the construction period would be less than significant.

(2) Operation - Electricity

Development of the proposed Project would increase the existing demand for electricity service from the Project Site. The proposed Project would continue to be served from the existing power grid. Table IV.K-5 on page IV.K-46 above, provides an estimate of historic electricity demand from existing structures. As shown in Table IV.K-7 on page IV.K-52, below, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kWh per year. It is important to note that this estimate is conservative in that it does not take into account the energy-efficient PDFs that would be incorporated into new on-site occupied buildings. As detailed above, these PDFs would require the Project to exceed Title 24 energy conservation requirements and require the Project to incorporate energy conservation measures that may include, but are not limited to: education on energy conservation; energy efficient lighting; use of solar panels; and/or participation in LADWP's Green Power Program. As the proposed Project does not qualify for recently adopted City of Los Angeles green building ordinance (Ordinance 179,820), Title 24's requirements are more stringent than those of the City of Los Angeles for a project of this nature. As such, the Project would incorporate energy conservation measures that go beyond City requirements. These PDFs are anticipated to reduce on-site electricity demand for new occupied buildings by at least 10 percent when compared to the electricity demand for current on-site buildings. For a more detailed description of the Project's energy-efficient design features, please refer to Section IV.B, Air Quality, of this Draft EIR.

As mentioned above, the LADWP delivered a total of 24,313.51 million kWh of electricity in 2006 and projects a long-term growth rate in electricity consumption of 1.4 percent, or 218.82 million kWh, per year. Based on this projection, overall LADWP electricity consumption would conservatively increase by 437.64 million kWh between 2006 and 2008 to a total of 24,751.15 million kWh and by approximately 8,752.8 million kWh between 2010 and 2050, the year of Project buildout. As such, the proposed Project's

Table IV.K-7
Estimated Electricity Demand of the Proposed Project

Land Use	Occupied Building Size (sf)	Consumption Rate [a] (kWh/sf/year)	Total (kWh/year)
Existing Baseline			
Existing	98,679	N/A [b]	2,225,663
Interim Projects	8,723	22.55	196,704
Subtotal Existing & Interim	*107,402*		*2,422,367*
Proposed Project			
Proposed Project Subtotal	*22,489*	*22.55*	*507,127*
Total (Existing, Interim, and Proposed Project)	**129,891**		**2,929,494**
Less Existing Baseline Total	**(107,402)**		**(2,422,367)**
Proposed Project Net Increase	**22,489**		**507,127**

Note: sf: square feet; kWh: kilowatt-hours

[a] *Forest Lawn Memorial-Park Association, July 26, 2010.Consumption Rate was estimated by dividing the six-year average reported annual electricity usage between the years 2004-2009 (2,225,663 kWh) by the total existing occupied square feet (98,679 sf).*

[b] *The existing electricity rate is based on the six-year average reported annual electricity usage between the years 2004-2009 (2,225,663 kWh). Due to rounding the average electricity demand of 22.55 was only applied to the projected demands.*

Source: Matrix Environmental, 2010.

conservative net increase in electricity consumption of approximately 507,127 kWh represents a negligible increase (approximately 0.02 percent) of the total existing LADWP electricity consumption, and, similarly a negligible increase (less than 0.02 percent) of the total LADWP projected increase in electricity consumption in the foreseeable future. Given the negligible net increase in on-site electricity demand in comparison to overall LADWP electricity generation, the LADWP would be anticipated to be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Therefore, the proposed Project would result in a less than significant impact with regard to electricity supplies.

Regarding electricity delivery infrastructure, some of the lines needed to serve the proposed Project, which will include cemetery development in areas of the Project Site that are currently undeveloped, currently do not exist. The LADWP already supplies existing loads to the Project Site though a transformer station located adjacent to, but outside of the Project Site. The additional load from proposed Project buildings, structures, and facilities

may require the Project Applicant to provide for an on-site transformer station to supply both the new and existing load. As such, under PDF K-3 above, the Applicant would be responsible for the installation of required infrastructure improvements and associated pro-rata share financial contributions towards improvements needed to serve the proposed Project. Therefore, with the implementation of PDF K-3, Project impacts related to the electricity delivery infrastructure would be less than significant.

(3) Operation - Natural Gas

Implementation of the proposed Project would increase the demand for natural gas at the Project Site. Table IV.K-6 on page IV.K-46 above, provides an estimate of historic natural gas consumption from existing structures. Existing demand is approximately 5,325,417 cubic feet per year. When combined with the Interim Projects, the total baseline demand for natural gas would be approximately 5,796,197 cubic feet per year, or approximately 483,016 cubic feet per month. As shown in Table IV.K-8 on page IV.K-54, the proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,881 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,078 cubic feet per year or 836,673 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed.[24]

New lines connecting the main line to each of the proposed structures requiring natural gas service would be provided as needed during construction of each structure. As stated previously and stated in PDF K-4 above, all of the proposed buildings utilizing natural gas service would meet or exceed the State Energy Conservation Standards contained in Title 24 of the California Code of Regulations, which is a set of prescriptive standards establishing mandatory maximum energy consumption levels for buildings.

As mentioned above, the Project would not require new (off-site) natural gas facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities and would incorporate energy conservation measures that go beyond City requirements. Therefore, Project impacts related to natural gas supply and infrastructure would be less than significant.

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[24] *Letter correspondence from Mangione Mitchell, Planning Assistant, Southern California Gas Company, March 24, 2009.*

Table IV.K-8
Estimated Natural Gas Demand of the Proposed Project

Land Use	Occupied Building Size (sf)	Consumption Rate [a] (cf/sf/year)	Total Natural Gas Usage (cf/year)
Existing Baseline			
Existing	98,679	N/A [b]	5,325,417
Interim Projects	8,723	53.97	470,780
Subtotal Existing & Interim	*107,402*		*5,796,197*
Proposed Project			
Occupied Structures	17,489	53.97	943,881
Crematory	5,000	3,300,000 [c]	3,300,000 [b]
Proposed Project Subtotal			*4,243,881*
Total (Existing, Interim, and Proposed Project)	**129,891**		**10,040,078**
Less Existing Baseline Total	**(107,402)**		**(5,796,197)**
Proposed Project Net Increase	**22,489**		**4,243,881**

[a] *Forest Lawn Memorial-Park Association July 26, 2010.Consumption Rate was estimated by using the average natural gas usage over a six year period from 2004 to 2009 and dividing the usage by the amount of occupiable square feet.*

[b] *The existing natural gas rate is based on the six-year average reported annual electricity usage between the years 2004-2009 (5,325,417 cf/yr). Due to rounding the average electricity demand of 53.97 was only applied to the projected demands.*

[b] *This estimate is based on similar gas usage for the crematory report at the Forest Lawn Memorial-Park - Glendale facility which burns on average about 3,300,000 cf.*

Source: Matrix Environmental, 2010.

3. Cumulative Impacts

Development of the proposed Project, in combination with related projects and projected population growth in the greater Los Angeles area not captured within the related projects list, could create an increased demand for electricity and natural gas supplied by the LADWP and the Southern California Gas Company, respectively. The cumulative effect of the proposed Project and other new and added loads may require near term and/or future additions to distribution system capacity. These cumulative effects may require the LADWP to construct additional distribution facilities.

All new development in California is required to be designed and constructed in conformance with State Building Energy Efficiency Standards outlined in Title 24 of the California Code of Regulations. It is possible that implementation of the related projects (and other development in the greater Los Angeles area) could require the removal of older structures that were not designed and constructed to conform with the more recent and stringent energy efficiency standards. Thus, it is possible that with implementation of some of the related projects and other development, the resulting demand for electricity and natural gas supply could be the same or less than the existing condition. Nonetheless, both LADWP and the Southern California Gas Company undertake expansion or modification of service infrastructure and distribution systems to serve future growth in the City as required in the normal process of providing electricity and natural gas service. Any potential cumulative impacts related to electricity and natural gas service would be addressed through this process. Therefore, cumulative impacts related to electricity and natural gas supply would be less than significant.

4. Mitigation Measures

As discussed above, the proposed Project's impacts to the electricity and natural gas infrastructure would be less than significant without mitigation. As such, no mitigation measures are required.

5. Level of Significance After Mitigation

The proposed Project would not cause a notable increase in electricity or natural gas demand to a point where the existing water delivery infrastructure or the available supplies would not be able to accommodate the proposed Project. As such, the potential impacts upon the local electricity and natural gas delivery infrastructure and available supplies would therefore be less than significant and no mitigation measures were required.

IV. Environmental Impact Analysis

K.4 Public Utilities – Solid Waste

1. Environmental Setting

This section of the Draft EIR evaluates the proposed Project's potential impacts on existing solid waste facilities. The analysis describes existing solid waste facilities and their associated capacities, estimates the amount of solid waste to be generated during Project construction and operation, and evaluates whether existing and planned solid waste facilities could accommodate expected Project-generated waste. An assessment of the proposed Project's consistency with applicable solid waste regulations is also included in this section.

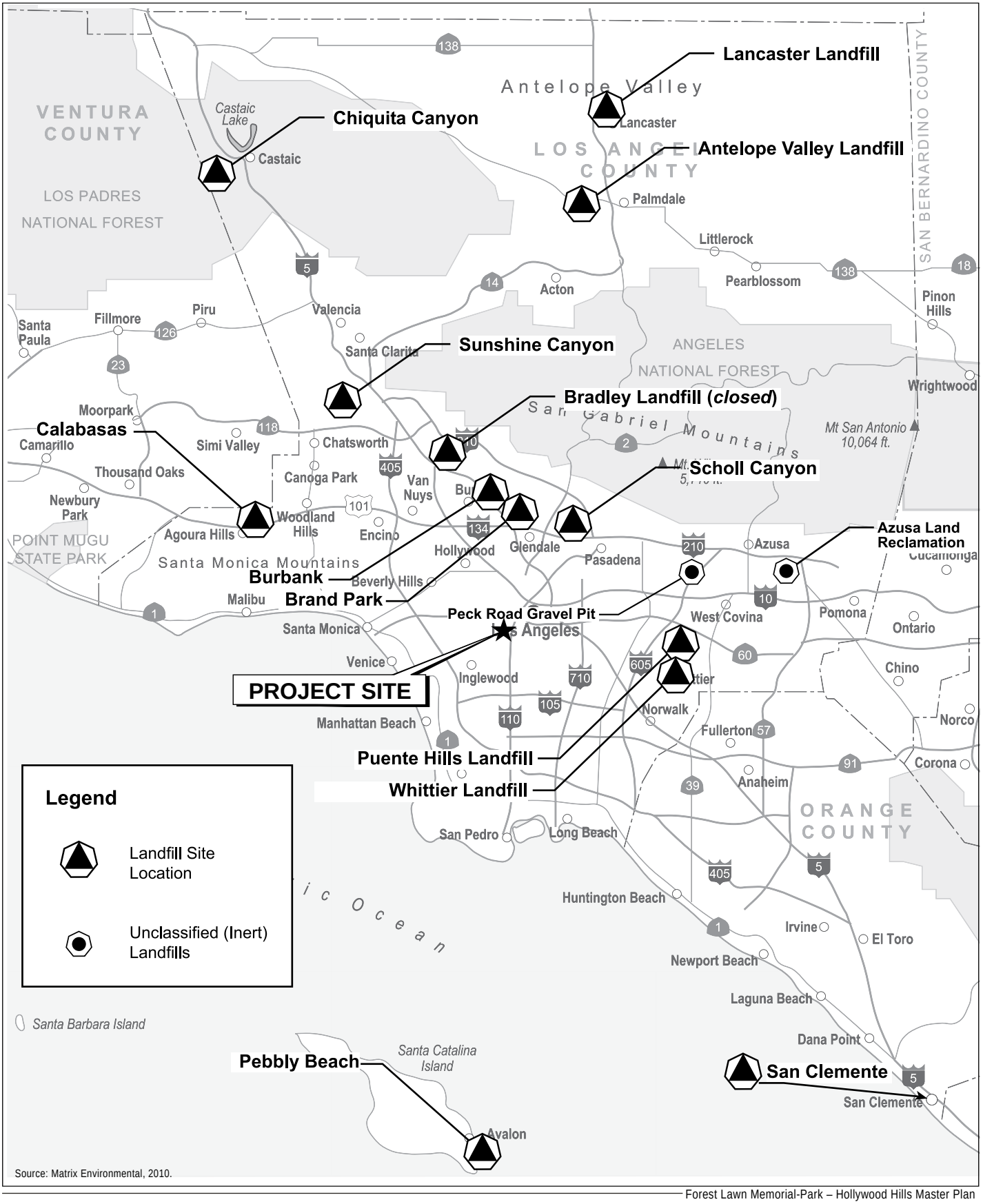
a. Regional Setting

Landfills within Los Angeles County (County) are generally classified either as Class III landfills, which accept non-hazardous solid waste, or unclassified (inert) landfills, which accept construction and demolition waste, yard trimmings, and earth-like waste. Twelve Class III landfills and three unclassified landfills are located within the County.[25] Figure IV.K-1 on page IV.K-57 provides the locations of these landfills.

Demand for landfill capacity is continually evaluated by County through preparation of the Los Angeles County Integrated Waste Management Plan (CoIWMP) annual reports. The 2008 ColWMP Annual Report, which is the most recent report available, was completed in October 2009. As with previous annual reports, the 2008 CoIWMP Annual Report assesses future landfill disposal needs over a 15-year planning horizon based, in part, on forecasted waste generation and available landfill capacity from 2008 to 2023. Several factors are used in the 2008 ColWMP Annual Report to determine landfill capacity, including: (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirements permits, solid waste facilities permits, and air quality permits), (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries, and (3) operational constraints.

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[25] *The Bradley Landfill closed in April 2007, thereby leaving twelve operational Class III landfills in Los Angeles County.*



Source: Matrix Environmental, 2010.

matrix environmental

Figure IV.K-1
County of Los Angeles Landfills

As discussed in the 2008 ColWMP Annual Report, without changes in the status quo, a shortage of permitted solid waste disposal capacity at in-County Class III landfills is projected by 2014. This calculated shortage is due in part to a lack of suitable sites for developing new landfills, and limited expansion potential of existing landfills. Nonetheless, the 2008 ColWMP Annual Report anticipates that future disposal needs can be adequately met through 2023 via scenarios that include some combination of the following: (1) use of existing in-County Class III landfills and transformation facilities; (2) proposed expansion of in-County Class III landfill capacity through new or existing facilities; (3) use of out-of-County landfills for disposal, including waste-by-rail facilities; (4) use of conversion technologies; (5) expansion of diversion infrastructure; and (6) maximization of waste reduction and recycling.

b. City of Los Angeles Waste Disposal

(1) Solid Waste Collection and Disposal

Within the City of Los Angeles, solid waste management, including collection and disposal services and landfill operation, is administered by the City of Los Angeles Bureau of Sanitation and private companies. Refuse from single-family residential and limited multi-family residential uses on public streets is collected by the Bureau of Sanitation. Waste generated by the majority of multi-family residential sources and all commercial and industrial sources is collected by private contractors. Construction waste is also collected by private contractors. Various transfer and disposal facilities, the majority of which are located within the City, are used to manage the remaining solid waste not diverted from the solid waste stream.

Waste disposal sites or landfills which accept waste generated within the City of Los Angeles are owned and operated by the County of Los Angeles Sanitation District ("County"), as well as by private companies. In addition, transfer stations are utilized to temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills. 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; (3) types of waste; and (4) operational constraints.

(2) Landfills

Over 75 percent of the City's solid waste in 2008 was disposed of at two facilities, the Chiquita Canyon Landfill and the Sunshine Canyon Landfill (both the City and County

portions).[26] As Class III landfills, these two landfills accept all types of non-hazardous solid waste. As of 2008, these two landfills have a remaining daily permitted intake of 7,329 tons per day (tpd).[27]

(a) Chiquita Canyon Landfill

The Chiquita Canyon Landfill, owned and operated by Waste Connections,[28] covers 135 acres of land located northwest of Valencia, in an unincorporated area of the County. As of April 2010, the Chiquita Canyon Landfill had a remaining permitted capacity of 29,300,000 cubic yards with a daily permitted intake of 6,000 tons.[29] The Chiquita Canyon Landfill currently accepts an average of 4,822 tons per day and, therefore, has a remaining daily capacity intake of 1,178 tons per day (refer to Table IV.K-9 on page IV.K-60). Chiquita Canyon also separately accepts green waste compost material. The composting facility is currently operating at approximately 100 tons per day and may increase the tonnage, incrementally, up to 560 tons per day upon written approval from the Local Enforcement Agency. The Chiquita Canyon Landfill is currently permitted to operate through 2019. However, in 2004 the landfill's prior owner/operator, Republic Services, submitted a Conditional Use Permit application for a proposed horizontal and vertical expansion increase in disposal area of 98 acres. Under the Conditional Use Permit, the daily disposal capacity would remain at 6,000 tons per day, but the long-term capacity would be increased to 32 million tons and the life expectancy of the landfill would be extended an additional 21 years.[30] The expansion proposal is currently pending, to be pursued by the new owner, Waste Connections.

(b) Sunshine Canyon City/County Landfill

The Sunshine Canyon Landfill, located in Sylmar, is owned and operated by Browning-Ferris Industries, which purchased the landfill from the City in 1978. The Sunshine Canyon Landfill previously operated as two distinct entities; the Sunshine

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[26] *County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan, 2008 Annual Report, Appendix E-5: Map of Disposal by Jurisdiction of Origin. October 2009.*

[27] *County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan, 2008 Annual Report, October 2009.*

[28] *On February 6, 2009, Republic Services and Waste Connections signed a definitive agreement providing for the sale of the Chiquita Canyon Landfill to Waste Connections, Inc.*

[29] *http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-0052/Detail/, accessed September 28, 2010.*

[30] *County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan, 2008 Annual Report, Appendix E-1: Solid Waste Facility Fact Sheets, October 2009.*

Table IV.K-9
Landfill Capacity and Intake

Landfill Facility	Estimated Closure Date	Permitted Daily Intake (tpd)	Average Daily Intake (tpd)	Remaining Permitted Daily Intake (tpd)
Chiquita Canyon Landfill	2019 [a]	6,000	4,822	1,178
Sunshine Canyon City/County Landfill	2037	12,100	5,949	6,151
Antelope Valley Recycling & Disposal Facility	2028 [b]	3,200 [b]	979	2,221
Lancaster Landfill & Recycling Facility	2035 [c]	1,700 [c]	1,141	559
			Total Remaining Intake	**10,109**

[a] *An expansion of the Chiquita Canyon Landfill is currently proposed that would increase the remaining permitted capacity to 23.9 million tons and extend the life expectancy of the landfill to 21 years.*

[b] *A proposed expansion would result in an additional 8.96 million tons of permitted remaining capacity and extend the life of the landfill another approximately 8 years. Upon approval of this expansion, the daily permitted intake would be increased to 3,600 tons per day.*

[c] *This facility is proposing to expand its permitted daily tonnage from 1,700 to 3,000 tpd. A Preliminary Draft Supplemental EIR (State Clearing House No. 2004061006), dated March 2006, was prepared for this expansion project.*

Source: County of Los Angeles, Department of Public Works, Environmental Programs Division, Los Angeles County Countywide Integrated Waste Management Plan, 2008 Annual Report, Countywide Summary Plan and Countywide Siting Element, Appendix E-1: Solid Waste Facility Fact Sheets. October 2009.

Canyon City Landfill and the Sunshine Canyon County Landfill. However, on December 31, 2008, operations in the Sunshine Canyon City Landfill and the Sunshine Canyon County Landfill were combined into what is known as the Sunshine Canyon City/County Landfill. As of December 31, 2008, the combined Sunshine Canyon City/County Landfill will provide approximately 22 years of waste disposal capacity based on a maximum permitted disposal rate of 12,100 tons per day and 312 operating days per year. The Sunshine Canyon City/County Landfill currently accepts approximately 5,949 tons of waste per day and, therefore, has a remaining daily capacity intake of 6,151 tons (refer to Table IV.K-9).

(c) Additional Solid Waste Disposal Options

While the Chiquita and Sunshine Canyon City/County Landfills provided for approximately 75 percent of the City's Class III solid waste disposed of at in-County landfills in 2008, the Antelope Valley, Lancaster and Calabasas Landfills provided for the remaining 25 percent of the City's Class III solid waste disposed of at in-County landfills Based on data from the 2008 ColWMP Annual Report, as of December 2008, the

estimated remaining capacity of all of the in-County Class III landfills serving the City of Los Angeles is 119.57 million tons.

In addition, there are two solid waste transformation facilities within Los Angeles County. The Commerce Refuse to Energy Facility disposed of approximately 0.102 million tons of solid waste in 2008 and has a permitted capacity of 1,000 tons per day. The Southeast Resource Recovery Facility, located in the City of Long Beach, disposed of approximately 0.477 million tons of solid waste in 2008 and has a permitted capacity of 500,000 tons per year. The City of Los Angeles disposed of approximately 18,444 tons at the Commerce Refuse to Energy in 2008. It is expected that these two facilities will continue to operate at their current permitted capacities through the 2008 ColWMP planning period of 2023. The owners and operations of these facilities indicated that there are no plans to increase the daily capacity.

Waste-by-rail has the potential to create substantial solid waste disposal capacity. Waste-by-rail systems allow the County to transport waste via existing railways to remote out-of-County disposal facilities. They involve the collection of recyclable waste at material recovery facilities and the loading of remaining non-hazardous wastes into rail-ready shipping containers. These containers are delivered by truck to local rail yard loading facilities where they are then transported to remote landfills designed and permitted to receive waste via rail. The Mesquite Regional Landfill in Imperial County is a waste-by-rail landfill that is anticipated to be available for use by the County. In August 2000, the County Sanitation Districts of Los Angeles County (CSDLAC) entered into purchase agreements for this landfill. The site is located approximately 200 miles east of Los Angeles along the Union Pacific Railroad. The Mesquite Regional Landfill is fully permitted to accept residual solid waste transported from southern California communities by rail. The approved landfill footprint of 2,290 acres will provide capacity for approximately 600 million tons of solid waste and 100 years of operation at a maximum of 20,000 tons per day (tpd).[31] CSDLAC, which completed the purchase of this facility in December 2002, expects the site to be operational by 2010 and ready for waste-by-rail in 2011/2012.[32]

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[31] *County of Los Angeles, Department of Public Works; Los Angeles County Integrated Waste Management Plan 2008 Annual Report, October 2009.*

[32] *The 2007 CoIWMP identified the proposed Eagle Mountain landfill in Riverside County as a potential waste-by-rail facility. However, in November 2009, the Federal Court of Appeals for the Ninth Circuit ruled that the Environmental Impact Statement for the project was not adequate in several aspects and that the Bureau of Land Management undervalued the public land to be traded. In February 2010, the Department of Interior decided not to appeal the decision and not pursue the project.*

(d) Inert Waste Landfills

Inert wastes such as soil, concrete, asphalt, and other construction and demolition (C&D) debris are disposed of at the County's three unclassified landfills. Based on data from the 2008 ColWMP Annual Report, the estimated remaining disposal capacity for unclassified landfills serving the County is estimated at approximately 57.215 million tons. In 2008, approximately 0.176 million tons of inert wastes were disposed of at these three County unclassified landfills. Two of these unclassified landfills, the Azusa Land Reclamation landfill and Peck Road Gravel Pit serve the City of Los Angeles. These two landfills have an estimated remaining capacity of 56.95 million tons based on the 2008 ColWMP Annual Report. Thus, unclassified landfills serving the City and County generally do not face capacity issues.

c. Existing Project Disposal

Currently, solid waste generated at Forest Lawn Memorial-Park – Hollywood Hills from ongoing activities includes office waste products (i.e., paper), earth materials and concrete associated with interment site preparation, and green waste generated from ongoing landscape maintenance activities. In addition, Interim Projects planned to be completed between 2008 and 2012 are considered as part of the existing development. These projects would generate demolition debris (e.g., building materials, cement, asphalt, and plant materials), and construction-related debris (e.g., scrap lumber, metal, and concrete/masonry materials). Green waste generated from ongoing landscape maintenance activities within the Memorial-Park is generally reprocessed and is either reused for landscape mulch, or taken to a facility where it can be recycled, mixed and sold. Therefore, green waste generated from the site is not included within the estimate of solid waste generated by existing development. As identified in Table IV.K-10 on page IV.K-63, total existing solid waste generation at Forest Lawn Memorial-Park - Hollywood Hills is conservatively estimated to be approximately 2,253 pounds per day.

Within the City of Los Angeles, solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Refuse from single-family residential and limited multi-family residential uses on public streets is collected by the Bureau of Sanitation. Waste generated by the majority of multi-family residential sources and all commercial and industrial sources is collected by private contractors. Construction waste is also collected by private contractors. Various transfer and disposal facilities, the majority of which are located within the City, are used to manage the remaining solid waste not diverted from the solid waste stream.

Waste disposal sites or landfills which accept waste generated within the City of Los Angeles are owned and operated by the County of Los Angeles Sanitation District

Table IV.K-10
Solid Waste Generation of Existing Development

Structure	Occupied Building Size (sf)	Employee	Generation Rate (lbs/employee/ day)	Total (lbs/ day)
Existing Structures				
Existing Structures Subtotal	98,679 [b]	197	10.53	2,074
Interim Projects Subtotal	8,723	17	10.53	179
Total Existing Development [c]	**107,402**	**214**	**--**	**2,253**

[a] *Solid waste generation rates provided by City of Los Angeles CEQA Thresholds Guide (2006) do not include a generation rate for cemetery-related uses. Therefore, the solid waste generation rate for the generic "Commercial" land use category was applied.*
[b] *The Forest Lawn Memorial-Park - Hollywood Hills property currently employs approximately 197 employees, which equates to approximately 1 employee per 500 square feet of occupiable floor area.*
[c] *Existing Development plus net new development resulting from the Interim Projects.*

Source: Matrix Environmental, 2010.

("County"), as well as by private companies. In addition, transfer stations are utilized to temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills. 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; (3) types of waste; and (4) operational constraints.

d. Regulatory Setting

(1) State Level

(a) California Integrated Waste Management Act of 1989 (AB 939)

The California Integrated Waste Management Act of 1989 (AB 939) and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, were enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by 2000. AB 939 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.

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element to describe how the city would reach the goals. The Source Reduction and Recycling Element must contain programs and policies for fulfillment of the goals of AB 939, 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 CalRecycle to update the agency on the jurisdictions progress toward attainment of the AB 939 goals (i.e., source reduction, recycling and composting, and environmentally safe land disposal).[33]

(b) California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900-42911, as amended. AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists within the jurisdiction, the CalRecycle model ordinance shall take effect. Pursuant to AB 1327, the City of Los Angeles adopted the Space Allocation Ordinance (Ordinance No. 171687), discussed below.(c) Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements Passed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) added Public Resources Code, Section 42912. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting C&D waste. The legislation also requires that CalRecycle adopt a model ordinance for diverting 50-75 percent of all C&D waste from landfills.

(c) Zero Waste California

Zero Waste California is a State-launched program that promotes a new vision of waste. Zero waste is based on the concept that wasting resources is inefficient and that the efficient use of natural resources should be achieved. The concept is premised on maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero

[33] *CalRecycle is a new department within the California Natural Resources Agency and administers programs formerly managed by the State's Integrated Waste Management Board and Division of Recycling.*

Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

(2) Regional Level

(a) Los Angeles County Integrated Waste Management Plan

The Los Angeles County Integrated Waste Management Plan (CoIWMP), which was formally approved on June 23, 1999, is a set of planning documents that sets forth a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The CoIWMP recognizes that landfills will remain an integral part of the County's solid waste management system in the foreseeable future and assures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939.

The CoIWMP includes the Countywide Integrated Waste Management Summary Plan (Summary Plan), which was approved by the California Integrated Waste Management Board (now CalRecycle) on June 23, 1999. Pursuant to AB 939, the Summary Plan describes the actions to be taken to achieve the mandated waste diversion goals of AB 939. The Summary Plan establishes countywide goals and objectives for integrated waste management; establishes an administrative structure for preparing and managing the Summary Plan; describe the countywide system of governmental solid waste management infrastructure; describes the current system of solid waste management in County and the cities; summarize the types of solid waste programs; and describe programs that could be consolidated or coordinated countywide; and analyzes how these countywide programs are to be financed.

The Countywide Siting Element (Siting Element), prepared by the County pursuant to AB939, is also part of the ColWMP. The Siting Element identifies goals, policies, and strategies that provide for the proper planning and siting of solid waste disposal and transformation facilities for the next 15 years. The Siting Element was approved by the California Integrated Waste Management Board on June 24, 1998 and provides strategies and establishes siting criteria for evaluating the development of needed disposal and transformation facilities. The County is currently in the process of updating the Siting Element to reflect the most recent information regarding remaining landfill disposal capacity and the County's current strategy for maintaining adequate disposal capacity.

To provide an annual update on the CoIWMP, the County Department of Public Works prepares CoIWMP Annual Reports. The CoIWMP Annual Reports provide an assessment of the Summary Plan and the Siting Element. Additionally, as previously discussed, the CoIWMP Annual Reports analyze solid waste disposal and estimated future

remaining capacity at County landfills. As described above, the 2008 ColWMP Annual Report dated October 2009 is the most recent report available.

(3) City Level

Within the City, solid waste management is governed by several Citywide plans including the City of Los Angeles Solid Waste Integrated Resources Plan (Zero Waste Plan), the City of Los Angeles Solid Waste Management Policy Plan, the Source Reduction and Recycling Element, the General Plan Framework Element (Framework Element), the Solid Resources Infrastructure Strategy Facilities Plan, the RENEW LA Plan, the Green LA Plan and the City of Los Angeles Municipal Code (LAMC), each of which is discussed below.

(a) City of Los Angeles Solid Waste Integrated Resources Plan (Zero Waste Plan)

The City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP) or Zero Waste Plan is a six year planning effort that outlines the City's objectives to provide sustainability, resource conservation, source reduction, recycling, renewable energy, maximum material recovery, public health and environmental protection for solid waste management planning through 2030 — leading Los Angeles towards being a "zero waste" city (consistent with the RENEW LA goal – discussed further below). The SWIRP process, composed of three phases, aims to develop and implement a 20-year Zero Waste Master Plan by 2013. Phase I, initiated in 2007, employed stakeholder input to determine the guiding principles and vision of the SWIRP. Phase 1 culminated in the adoption of the stakeholder Guiding Principles at the citywide conference held on May 3, 2008. Phase II, initiated in 2008 and which is still currently in process, involves the actual preparation of the Zero Waste Master Plan. Using the guiding principles developed in Phase I, it will develop a Policy, Program, and Facility Plan, an Environmental Impact Report, and Financial Plan. These documents will detail the infrastructure, programs, policies, regulations, incentives, technological innovation and financial strategies necessary to: (i) eliminate the use of urban landfills, (ii) develop alternative technologies to convert waste to renewable energy fuels and products, (iii) increase recycling and resource recovery, (iv) convert Bureau of Sanitation trucks to clean renewable alternative fuels, and (v) lead the way for Los Angeles to become a zero-waste city.[34] Phase III will implement the Zero Waste Master Plan. It may involve the implementation of new Bureau of Sanitation programs, the addition or modification of solid waste infrastructure, and new solid waste legislation.

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[34] *City of Los Angeles, Department of Public Works, Welcome to SWIRP: A Zero Waste Plan for Los Angeles, accessed online at: http://www.zerowaste.lacity.org/about/welcome.html, accessed July 12, 2010.*

(b) City Solid Waste Management Policy Plan and Source Reduction and Recycling Element

The Solid Waste Management Policy Plan, adopted in November 1994, is the long-range solid waste management policy plan for the City, while the Source Reduction and Recycling Element, updated in 2001, is the strategic action policy plan for diverting solid waste from landfills. The objective of the Solid Waste Management Policy Plan is to reduce at the source or recycle a minimum of 50 percent of the City's waste by 2000, or as soon as possible thereafter. The Solid Waste Management Policy Plan calls for the disposal of the remaining waste in local and possibly remote landfills. The Solid Waste Management Policy Plan establishes a City-wide diversion objective of 70 percent by 2020.[35] The Solid Waste Management Policy Plan provides direction for solid waste management and integrates all facets of solid waste management planning. It ensures that disposal practices do not conflict with diversion goals.

The following five goals of the Solid Waste Management Policy Plan reflect the importance of source and materials recovery to the success of the plan and, therefore, the intent of the City to follow state regulations:

- To create an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes waste requiring disposal;
- To expand the siting of facilities that enhance waste reduction, recycling, and composting throughout the City beyond the current limits of the zoning code in ways that are economically, socially, and politically acceptable;
- To ensure that all mixed solid waste that cannot be reduced, recycled, or composted is collected, transferred, and disposed in a manner that minimizes adverse environmental impacts;
- To develop an environmentally sound solid waste management system that protects public health and safety, protects natural resources, and utilizes the best available technology to accommodate the needs of the City; and
- The City shall operate a cost-effective integrated waste management system that emphasizes source reduction, recycling, reuse, and market development and is adequately financed to meet operational and maintenance needs.

[35] *The 70 percent diversion objective is a Citywide objective that would be met by the City of Los Angeles implementing policies and programs. Individual development projects would contribute to achieving this objective via compliance with those policies and programs the City chooses.*

The City surpassed the State-mandated 50 percent diversion rate for the year 2000 and achieved a diversion rate of 65 percent as of June 2009.[36] In addition, in 1999, the Mayor directed City departments to develop strategies to achieve the Citywide recycling goal of 70 percent by 2020.

The City's Source Reduction and Recycling Element serves as a guidance document and strategic action plan for diverting solid waste from landfills. The Source Reduction and Recycling Element provides a 10-year programmatic plan for solid waste diversion objectives between 1990 and 2000, in accordance with the requirement of AB 939. It is based on an ongoing evaluation of programs and waste analysis. The plan establishes diversion objectives for specific programs and targeted generators that, in combination, could enable the City to exceed the 1995 and 2000 diversion objectives of the City of Los Angeles Solid Waste Management Policy Plan. It also presents an analysis of the projected 15-year disposal capacity requirements for the City of Los Angeles based on achieving the 1995 and 2000 diversion objectives of the Source Reduction and Recycling Element and, with continual increased diversion, the City of Los Angeles Solid Waste Management Policy Plan long-term diversion objectives. Guidance for, and implementation of, the solid waste diversion programs identified in the Source Reduction and Recycling Element are administered by the City of Los Angeles Department of Public Works, Bureau of Sanitation, Solid Resources Citywide Recycling Division.

(c) City General Plan Framework Element (Framework Element)

The Framework Element is a strategy for long-term growth that establishes a City-wide context to guide the update of the community plans and Citywide General Plan elements. The Framework Element responds to State and Federal mandates to plan for the future. In planning for the future, the City uses population forecasts provided by the Southern California Association of Governments. The Framework Element supports AB 939 and its goals by encouraging a solid waste management system "…that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal." Source reduction programs encouraged in the Framework Element include home composting, recycling programs such as the Curbside Recycling Program, and composting programs. The Framework Element suggests that for these programs to succeed, the City should site businesses at appropriate locations within its borders that handle, process, and/or manufacture recyclable commodities to allow a full circle recycling system to develop. It also discusses how Recycling Market Development Zones and other

[36] *City of Los Angeles Department of Public Works, Bureau of Sanitation. Solid Resources: Recycling Information. Available at: http://lacitysan.org/solid_resources/recycling/index.htm. Accessed June 28, 2010.*

development zone areas should be utilized to bring these beneficial businesses into Los Angeles, and suggests that development and support of recyclable materials markets is one of the City's challenges in the years ahead. The Framework Element addresses the means for dealing with the solid waste remaining after diversion, for which the City will have a continuing need for solid waste transfer and disposal facilities. It states that the capacity of the landfills located in Los Angeles is very limited, and that more transfer facilities will be needed to transfer waste from the collection vehicles and transport it to other, more remote landfill facilities. The Framework Element acknowledges that capacity must be provided for the waste collected by both City agencies and private collection companies and identifies several landfill disposal facilities that may be accessed by truck. The Framework Element also identifies other landfill disposal facilities that would require the City to ship its solid waste by train.

(d) City Solid Resources Infrastructure Strategy Facilities Plan

In its efforts to reach AB 939 goals and conform to the Framework Element, the City's Bureau of Sanitation prepared the Solid Resources Infrastructure Strategy Facilities Plan in 2000, which outlines several objectives, including but not limited to, the following:

- Develop a transfer facility and/or recycling center in the Central Los Angeles Area;
- Continue to research and develop the use of Material Recovery Facilities to preprocess all residual waste prior to delivery to a disposal site; and
- Develop a comprehensive and continual public education and community outreach program designed to educate and inform the public about the City's solid resources programs and strategies.

In addition to the preceding list of objectives, the Bureau of Sanitation also operates programs such as bulky item pick-ups, E-waste collection events, and curbside recycling from all single-family homes and small multiple family buildings in the City.

(e) RENEW LA Plan

In March 2006, the City Council adopted RENEW LA, a 20-year plan with a primary goal to shift from waste disposal to resource recovery, resulting in "zero waste" and an overall diversion level of 90 percent. The "blueprint" of the plan builds on the key elements of existing reduction and recycling programs and infrastructure, and combines them with new systems and conversion technologies to achieve resource recovery (without

combustion) in the form of traditional recyclables, soil amendments, and renewable fuels, chemicals, and energy. The plan also calls for reductions in the quantity and environmental impacts of residue material disposed in landfills.[37]

(f) Green LA Plan

In May 2007, the Mayor of Los Angeles presented the City Council with the *Green LA Plan*, an action plan to lead the nation in addressing global warming. The overall goal of the *Green LA Plan* is to reduce greenhouse gas emissions to 35 percent below 1990 levels by 2030. To achieve this target, a number of goals and objectives have been established in various focus areas. One such focus area is solid waste, as landfills are a major source of methane, a greenhouse gas produced by decomposing trash. The goals of the *Green LA Plan* are to shift from solid waste disposal to resource recovery and to recycle 70 percent of solid waste generated within the City by 2015. In 2008, the Mayor accelerated that goal to 75 percent diversion by 2013.[38]

(g) City of Los Angeles Municipal Code (LAMC)

Solid waste recycling within the City is also addressed via provisions set forth in various sections of the LAMC that were enacted as a part of the City of Los Angeles Space Allocation Ordinance (Ordinance No. 171,687, August 6, 1997). In addition to setting forth standards for the location and operating characteristics of recycling centers and processing facilities, the Ordinance also sets forth requirements for the inclusion of recycling areas within individual development projects. In accordance with the Space Allocation Ordinance, all new construction development projects, multi-family residential development projects of four or more units where the addition of floor area is 25 percent or more, and other development projects where the addition of floor area is 30 percent or more shall provide an adequate Recycling Area or Room for collecting and loading recyclable materials.

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[37] *City of Los Angeles Council District 12, Renew LA Plan, website: http://www.ci.la.ca.us/council/cd12/cd12rl1.htm, accessed May 6, 2010.*

[38] *City Solid Waste Programs and Policies, City of Los Angeles, accessed online at: http://www.zerowaste.lacity.org/files/info/fact_sheet/SWIRPPolicyNprogramsFactSheet_032009.pdf; September 21, 2010.*

(4) Recycling

(a) City of Los Angeles

The City of Los Angeles Department of Public Works Bureau of Sanitation, Solid Resources Citywide Recycling Division develops and implements source reduction, recycling, and composting programs in the City. The Solid Resources Citywide Recycling Division provides technical assistance to public and private recyclers, oversees the City's recycling program, manages the Household Hazardous Waste program, and helps create markets for recyclable materials. The Solid Resources Citywide Recycling Division provides information to public and private sectors regarding construction waste diversion through the publication of the *Construction and Demolition Recycling Guide*, which is a directory of recyclers and certified mixed-debris processors that serve the Greater Los Angeles area. In addition to an alphabetical listing of companies, the *Construction and Demolition Recycling Guide* also provides listings by materials accepted (i.e., wood waste, scrap metal, drywall, etc.) so that developers and contractors can tailor their recycling choices to suit different project needs.

2. Environmental Impacts

a. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a set of screening questions that address impacts with regard to solid waste. These questions are as follows:

Would the project:

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- Comply with federal, state, and local statutes and regulations related to solid waste?

In the context of these questions from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide* states that a determination of significance relative to potential solid waste impacts shall be made on a case-by-case basis, considering the following factors:

- Amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical solid waste generation rates;

- Need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and

- Whether the project conflicts with solid waste policies and objectives in the SRRE or its updates, CiSWMPP, Framework Element or Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.

Based on these factors, the proposed Project would have a significant impact if:

- The proposed Project creates a need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated solid waste.

- The proposed Project conflicts with solid waste policies and objectives in the City of Los Angeles Source Reduction and Recycling Element or its updates, City of Los Angeles Solid Waste Management Policy Plan, the City of Los Angeles General Plan Framework Element or the Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the City of Los Angeles Source Reduction and Recycling Element.

b. Project Impacts

(1) Project Design Feature

The Project Applicant has incorporated several Project Design Features (PDFs) targeted at reducing the Project's solid waste generation during Project construction as well as during long-term Project operations. Specifically, the Project Applicant would implement a construction debris recycling plan for all buildings constructed as part of the Project, with the explicit intent of requiring recycling during all phases of site preparation and building construction. In addition, the Project Applicant has committed to the following PDF, which would be implemented for the sole purpose of reducing the Project's solid waste generation:

> The Project Applicant shall continuously maintain in good order clearly marked, durable, and separate recycling bins to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times for the collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.

(2) Construction

As shown in Table IV.K-11 on page IV.K-73, proposed construction is conservatively estimated to generate approximately 2,146 tons of construction debris over the construction life cycle of the proposed Project. Construction debris associated with the Project would primarily be classified as inert waste. As described above, the two primary unclassified landfills that serve the City of Los Angeles are the Azusa Land Reclamation land fill and the Peck Road Gravel Pit. These two landfills have an estimated remaining capacity of 56.95 million tons based on the 2008 ColWMP Annual Report. Thus, disposal space in Los Angeles County is plentiful and the proposed Project would constitute a negligible portion of the overall total of disposal space for inert construction debris. Based on this data, it is concluded that there is no anticipated shortfall in disposal capacity for inert waste within the County. Conservatively assuming that none of the construction debris would be recycled, these facilities currently have adequate capacity to accommodate the Project's construction waste. Further, and as noted above, a construction debris recycling plan shall be implemented during site preparation and building construction. Thus, the Project's construction waste impacts (excluding excavated soil material) would be less than significant.

The soil on the Project Site has been determined to be generally suitable for export to other locations in need of suitable fill material. As discussed in Section IV.F, Hazardous Materials/Risk of Upset, of this Draft EIR, any contaminated soil that is encountered and determined unsuitable for fill material would be handled in accordance with all applicable local, State, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste, based on its waste classification and the waste acceptance criteria of the permitted disposal facilities. In any event, it is not anticipated that the estimated 713,000 cubic yards of soil export during the initial construction period would be disposed of at an inert landfill. Rather, it is anticipated that the majority of this soil would be used as fill in other construction projects throughout the region where suitable fill material is required. Therefore, the proposed Project would not adversely impact the remaining available capacity at inert landfills.

(3) Operation

As shown in Table IV.K-12 on page IV.K-74, upon completion, the proposed Project would result in a net increase of approximately 474 additional pounds (0.24 tons) of solid waste per day over existing baseline conditions. When combined with the existing baseline on-site generation of 2,253 pounds (1.13 tons) of solid waste per day, the total solid waste generation upon Project completion is estimated to be 2,727 pounds (1.36 tons) per day. The Project's increase in solid waste generation would not require any changes to the existing frequency or routes used for the current solid waste collection services that are currently serving the Project Site. In addition, concrete waste associated with interment

Table IV.K-11
Estimated Construction Waste Generation

Proposed Project Land Use [a]	Size (sf)	Generation Rate [b] (tons/sf)	Total Generation (tons)
Non-Residential	1,103,611	0.001945	2,146

[a] *Nonresidential buildings include private industrial, office, hotels/motels, other commercial, religious, educational, hospital and institutional, and miscellaneous buildings plus public industrial, educational, hospital, and other categories.*
[b] *U.S. Environmental Protection Agency, Report No. EPA530-R-98-010, Characterization of Building-Related Construction and Demolition Debris in the United States, June 1998, Chapter 2, page 2-4.*

Source: City of Los Angeles, Bureau of Sanitation, 2008.

Table IV.K-12
Estimated Solid Waste Generation from Proposed Project Buildings[a]

Structure	Occupied Building Size (sf)	Employee[a]	Generation Rate [b] (lbs/employee/day)	Total Generation (lbs/day)
Existing Plus Interim Projects	107,402[d]	214 [c]	10.53	2,253
Proposed Project	22,489	45[a]	10.53	474
Total Proposed Development [c]	**129,891**	**259**	**10.53**	**2,727**

[a] *Note that this analysis is conservative as the Project is anticipated to only add a few employees to assist with maintenance.*
[b] *Solid waste generation rates provided by City of Los Angeles CEQA Thresholds Guide does not have a generation rate for cemetery-related uses. Therefore, the solid waste generation rate for the generic "Commercial" land use category was applied.*
[c] *The Forest Lawn Memorial-Park - Hollywood Hills property currently employs approximately 197 employees and 98,679 sf of occupiable floor area. For purposes of estimating future solid waste impacts, the number of future employees is based on a factor of 1 employee per 500 sf. This is conservative as the project is anticipated to only add a few employees to assist with maintenance.*
[d] *Existing Development plus net new development resulting from the Interim Projects.*

Source: Matrix Environmental, 2010.

site preparation, green waste generated from ongoing landscape maintenance activities would occur between 2010 and 2050 as a result of interment site development. Green waste generated from landscaping activities would either be mulched and used on-site or transported to green waste recycling yards. As such, only solid waste would be disposed

of at the Class III Landfills serving the City of Los Angeles described above. The calculation of the Project's estimated solid waste generation is conservative and does not take into consideration the City's successful efforts to divert disposal of solid waste by 50 percent, in compliance with AB 939. Additionally, the calculation does not take into consideration the reduction in landfill disposal due to the City's current and future efforts to achieve a "zero waste" level (a 90 percent diversion rate) by the year 2025.

Thus it is likely that the amount of solid waste that would need to be landfilled would likely be less than this forecast based on successful implementation of these programs. However, for the purposes of this analysis and to provide for a worst-case scenario, it is assumed that all of the Project's solid waste would be disposed of in landfills. As indicated on Table IV.K-9 on page IV.K-60, the remaining combined daily capacity of the landfills that are likely to directly serve the Project (i.e., Chiquita Canyon Landfill and Sunshine Canyon City/County Landfill) is 7,329 tons per day. When compared with the combined remaining daily intake at the Chiquita Canyon and Sunshine Canyon Landfills of 7,329 tons per day, the proposed Project's net increase of 474 pounds (0.24 tons) per day represents a negligible amount (less than 0.01 percent) of the remaining daily intake at these landfills. While the landfills that would serve the Project (Chiquita Canyon and Sunshine Canyon) are currently anticipated to close by 2019 and 2037, respectively, the County anticipates that in-County landfills, out-of-County landfills (such as the Mesquite Regional Landfill), as well as new conversion technologies will be available to adequately serve future disposal needs through 2023.[39] In addition, in accordance with the requirements of AB 939, the County Department of Public Works will continue to update the Countywide Siting Element as part of the Countywide Integrated Waste Management Summary Plan to identify how the County and cities within the County will address the need for 15 years of disposal capacity to safely handle solid waste generated in the Los Angeles region which cannot be reduced, recycled, or composted. Therefore, Project impacts related to solid waste disposal capacity would be less than significant.

Furthermore, as the proposed Project would recycle green waste materials and would incorporate project design features to minimize its generation of solid waste materials, the Project would be consistent with the Solid Waste Management Policy Plan and Source Reduction and Recycling Element, as well as the provisions of the Countywide Integrated Waste Management Plan. The proposed Project would also provide adequate storage areas in accordance with the City of Los Angeles Space Allocation Ordinance (Ordinance No. 171,687), which requires that developments include a recycling area or room of specified size on site.[40] The Project would also promote compliance with AB 939

[39] *Los Angeles County Integrated Waste Management Plan 2008 Annual Report, October, 2009.*

[40] *Ordinance No. 171687 adopted by the Los Angeles City Council on August 6, 1997.*

and City waste diversion goals by providing clearly marked, source sorted receptacles to facilitate recycling. Thus, Project impacts associated with consistency with solid waste plans and policies would be less than significant.

3. Cumulative Impacts

The proposed Project, in combination with other reasonably foreseeable growth within the City of Los Angeles, would generate solid waste including construction-related (i.e., inert) waste, green waste, excavated earth materials, and commercial waste over the 40 year timeframe between 2010 and 2050, extending beyond the 15-year planning timeframe of the Countywide Integrated Waste Management Plan. Management of this waste stream is provided for on a regional basis, as set forth in the Countywide Integrated Waste Management Plan, and in acknowledgement of the regional context of the solid waste issue. Importantly, solid waste itself is a commodity whose ultimate disposal location (i.e., inside or outside the county) is dependent upon a number of factors. In the short-term, adequate landfill capacity exists to accommodate the proposed Project and other foreseeable future growth in the City of Los Angeles consistent with the requirements of AB 939. This is reflected in the County of Los Angeles Department of Public Works transmittal of the 2008 CoIWMP Annual Report, which states that the County would be able to provide for the disposal capacity needs of the City's residents and businesses during the 15-year planning period through a combination of all or some of the following: (1) expansion of existing in-County Class III landfills; (2) studying, promoting, and developing conversion technologies; (3) expansion of transfer and processing infrastructure; (4) development of a waste-by-rail system; and (5) maximization of waste reduction and recycling." However, there is a need to continue to develop solid waste management alternatives to accommodate future growth beyond the planning timeframe. The County will continually address landfill capacity through the preparation of annual CoIWMPs. The preparation of each annual CoIWMP provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity would slow considering the City's goal to achieve 75 percent diversion by 2013 and eventually a zero waste scenario by 2030. While it is anticipated that future iterations of the CoIWMPs would provide for improvements beyond 2023 to serve future waste disposal needs, it is conservatively concluded that potential cumulative impacts could result after 2023 due to related projects and future growth in the region. However, the Project's solid waste disposal demand is inconsequential when compared with existing and future landfill capacity. In addition, recycling programs would be implemented as part of the project. Thus, solid waste impacts would not be cumulatively considerable.

The proposed Project would be consistent with the Solid Waste Management Policy Plan and Source Reduction and Recycling Element and the City of Los Angeles Space Allocation Ordinance, as well as the provisions of the Countywide Integrated Waste

Management Plan, and the solid waste impacts from other reasonably foreseeable growth within the City of Los Angeles would be reviewed on a project-by-project basis for consistency with these planning documents at the time each is considered for approval. Based on the above, the project's cumulative contribution to regional solid waste landfill capacity would be less than significant.

4. Mitigation Measures

The proposed Project's impacts upon solid waste would be less than significant and no mitigation measures are required.

5. Level of Significance After Mitigation

As stated above, no project-specific solid waste mitigation measures are required. Compliance with the solid waste reduction measures that are part of the existing regulatory setting and implementation of the Project Design Features described above would ensure that the Project's impacts upon solid waste landfill capacity would be less than significant.

IV. Environmental Impact Analysis

L. Public Services - Fire Protection

This section of the Draft EIR analyzes the proposed Project's potential impacts on fire protection services as provided by the City of Los Angeles Fire Department (LAFD). The analysis addresses the proposed Project's impacts relative to facilities and equipment, fire flows, emergency response, wildland fire hazards, and emergency access. Information for this section was provided, in part, by written correspondence from the LAFD, which is included in Appendix J of this Draft EIR.

1. Environmental Setting

Fire prevention, fire suppression, and life safety services in the City of Los Angeles are provided by the LAFD. The Safety Element of the Los Angeles City General Plan, adopted November 26, 1996, as well as the Fire Code in the Los Angeles Municipal Code (LAMC) serve to guide City departments, government offices, developers and the public for the construction, maintenance and operation of fire protection facilities located within the City.

The LAFD has 3,586 uniformed personnel and 353 non-uniformed support staff.[1] Services of the LAFD include fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education and community service. A professionally trained staff of 1,104 firefighters (including 242 paramedic-trained personnel) is on duty at all times at 106 neighborhood fire stations located across the LAFD's 471 square-mile jurisdiction.[2]

a. Existing Facilities

The Project Site is located within the LAFD's Division 1, Battalion 5 which serves Hollywood, Los Feliz, and Griffith Park. Existing fire stations that currently serve the Project Site are listed in Table IV.L-1 on page IV.L-2 (see also Figure IV.L-1 on page IV.L-3

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[1] *About the LAFD website, http://www.lafd.org/about.htm, accessed April 6, 2010.*

[2] *Ibid.*

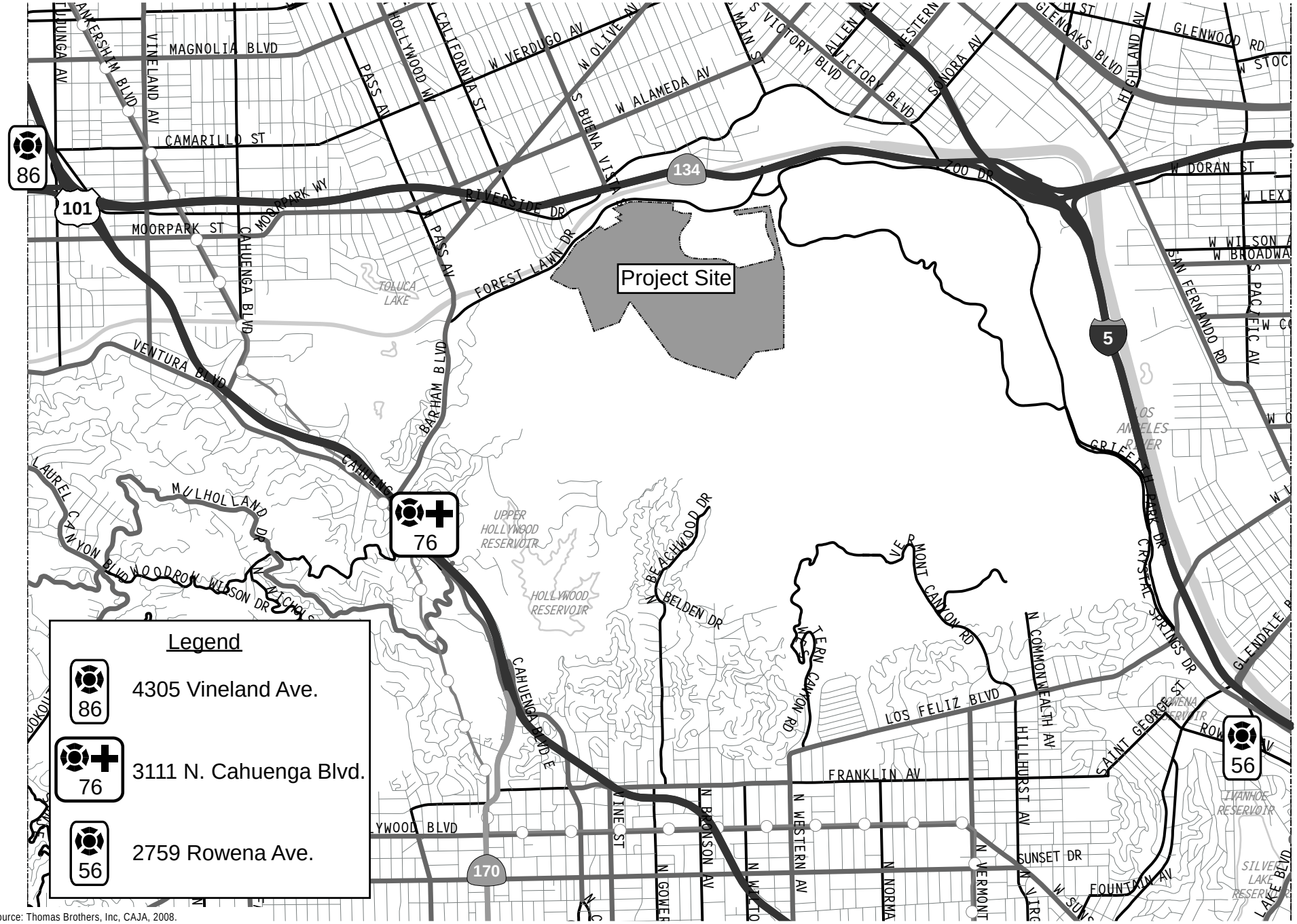
Table IV.L-1
Existing Fire Stations Serving the Project Site

Station No.	Location	Equipment1	Approx. Distance to Project Site (miles)
76	3111 N. Cahuenga Blvd.	• Assessment Engine • Rescue Ambulance	2.8
86	4305 Vineland Ave.	• Assessment Engine • Paramedic Ambulance • Urban Search and Rescue • Swift Water Rescue • Water Tender	3.7
56	2759 Rowena Ave.	• Assessment Engine • Paramedic Ambulance • Heavy Rescue	7.0

Source: City of Los Angeles CEQA Thresholds Guide, pp. K.2-8—K.2-10, and written correspondence from Captain William Wells, Planning Section, LAFD, June 30, 2008.

for the locations of these fire stations). As shown in Table IV.L-1, the Project Site receives primary fire protection and paramedic service from LAFD Station No. 76 located at 3111 North Cahuenga Boulevard in the Cahuenga Pass, approximately 2.8 miles from the Project Site. Fire Station No. 76 is staffed with six LAFD staff members at all times. Four members are assigned to the Paramedic Assessment Fire Engine, two members are assigned to the Paramedic Rescue Ambulance, and one member is assigned as the Emergency Medical Service (EMS) Battalion Captain.

Additional fire protection and emergency medical services are provided by Fire Station Nos. 86 and 56. Station No. 86 is located at 4305 Vineland Avenue in Studio City, approximately 3.7 miles from the Project Site. Station No. 86 is staffed with seven members at all times. Four members are assigned to the Paramedic Assessment Fire Engine, two members are assigned to the Paramedic Rescue Ambulance, and one member is assigned as the EMS Battalion Captain. Station No. 56 is located at 2759 Rowena Avenue in Silver Lake, approximately 7.0 miles from the Project Site. Station No. 56 is staffed with eight members at all times. Four members are assigned to the Paramedic Assessment Fire Engine, two members are assigned to the Heavy Rescue unit, and two members are assigned to the Paramedic Rescue Ambulance. According to the LAFD, existing staffing and resources are currently adequate to meet the demand for fire and EMS services in the Hollywood Community Plan Area.



Source: Thomas Brothers, Inc, CAJA, 2008.

Forest Lawn Memorial-Park – Hollywood Hills Master Plan

matrix environmental

NORTH

0 1/2 1 1 1/2 2

Scale (Miles)

Figure IV.L-1
Fire Station Location Map

Response distance relates directly to the linear travel distance (i.e., miles between a station and a site) and the LAFD's ability to successfully navigate the given accessways and adjunct circulation system. Roadway congestion and intersection level of service along the response route can affect the response distance when viewed in terms of travel time. The Fire Code specifies the maximum response distances recommended between specific sites and the nearest fire station, based on land use and fire flow requirements. Pursuant to Section 57.09.07A of the LAMC, the maximum response distance between residential land uses and an LAFD fire station that houses an engine or truck company is 1.5 miles; while for a commercial land use, the distance is 1.0 mile for an engine company and 1.5 miles for a truck company. When response distances exceed these recommendations, all habitable structures must be equipped with automatic fire sprinkler systems and any other fire protection devices deemed necessary by the Fire Chief (e.g., fire signaling systems, fire extinguishers, smoke removal systems).

As noted above, the closest LAFD fire station (No. 76) is approximately 2.8 miles from the Project Site. The LAFD has indicated that this response distance does not meet the Department's desired response distance standards.[3]

b. Fire Flows

In general, the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). Fire flow is normally measured in gallons per minute (gpm), as well as the duration of the fire flow. City-established fire flow requirements generally vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In any instance, a minimum residual water pressure of 20 pounds per square inch (PSI) is required to remain in the water system while the required gpm is flowing.

Water for fire flows for the area surrounding the Project Site is provided and maintained by the City of Los Angeles Department of Water and Power (LADWP). All water mains and lines that are designed and sized according to LADWP standards take into account fire flow and pressure requirements. There are two water mains located in Forest Lawn Drive; a low pressure, 24-inch water main that can supply approximately 5,000 gpm and a high-pressure, 8-inch water main that can supply 1,260 gpm fire flow and 400 gpm domestic flow.[4] The static water pressure in the area is 122 PSI maximum and 5

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[3] *Written correspondence from Captain William Wells, Planning Section, LAFD, June 30, 2008.*

[4] *Written correspondence from the City of Los Angeles Department of Water and Power, September 8, 2008.*

PSI minimum based on a water meter elevation of 480 feet above sea level for the low-pressure domestic water system. The static water pressure for the high-pressure domestic water system is 283 PSI maximum and 209 PSI minimum based on a ground elevation of 517 feet above sea level. In addition, the LADWP is designing a potable water trunk line along Forest Lawn Drive to replace the existing line. This replacement is scheduled to be built and operational in late 2013 and will increase both the fire and domestic water flow and pressure. Refer to Section IV.K.2, Utilities - Water, of this Draft EIR for a more detailed discussion of water service infrastructure in the Project area.

c. Wildland Fire Hazards

The Project Site abuts hillside areas within Griffith Park and the Santa Monica Mountains to the east, south, and west. The Project Site itself is characterized with hillsides, terraced hills, and some generally flatter areas, and is located within a Very High Fire Hazard Severity Zone, as designated by the City of Los Angeles.[5] As such, the Project Site is subject to brush clearance regulations enforced by the LAFD.

"Brush clearance" is a term that describes the process of treating or thinning vegetation to reduce fire hazards. The LAFD's Brush Clearance Unit enforces the regulations contained in Section 57.21.07 of the Fire Code pertaining to brush clearance on improved parcels. The extent of brush clearance required depends in part on the distance of the brush from buildings or structures. "Structure" is defined by the Fire Code as "[t]hat which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed parts joined together in some definite manner." LAMC, Chapter 5, Article 7, Section 57.02.02. The term "building" is not defined by the Fire Code.

Brush clearance requirements apply to any portion of property that is within 200 feet of any structure, even if the structure is not on the property. Area within 100 feet of a structure must be maintained to provide a "Defensible Space" where vegetation is less flammable and not excessive in volume. This "Defensible Space" allows firefighters to work around the structure while protecting it from fire. The area between 100 feet and 200 feet from structures is the "Fuel Modification Area." Reduction of the volume of plant material lessens the likelihood that radiated heat would ignite the structure. In extreme wind-driven fires, flame lengths can reach well beyond 100 feet. Clearance is required within 10 feet of roadways (driveway, road, alley), within 10 feet of combustible fences, and within 200 feet of structures.

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[5] *City of Los Angeles Department of City Planning. Parcel Profile Report: 6300 Forest Lawn Drive. Generated June 9, 2010.*

d. Emergency Access

Forest Lawn Drive provides direct access, including emergency access, to the Project Site. The main access into and out of the Project Site is located at Forest Lawn Drive and Memorial Drive. Emergency access is currently also provided by three subsidiary driveways, which are closed except for emergencies and maintenance activities: one west of the main entrance at Forest Lawn Drive near the western edge of the Project Site; one east of the main entrance at Forest Lawn Drive between Memorial Drive and Mount Sinai Drive; and one east of Mount Sinai Memorial Park.

2. Environmental Impacts

a. Thresholds of Significance

Appendix G of the CEQA Guidelines provides a screening question that addresses impacts with regard to fire protection service. This question is as follows:

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

In the context of this question from Appendix G of the CEQA Guidelines, the *City of Los Angeles CEQA Thresholds Guide*, states that a project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

b. Project Impacts

The Project would continue and expand the existing cemetery use on the Project Site. Approximately 22,500 square feet of occupiable floor area for new structures (including such structures as a new reception facility, administrative space, and a crematory) would be constructed, as well as approximately 1,100,000 square feet of non-occupiable floor area (for such uses as burial garden structures, wall crypts and columbaria), and approximately 200,000 new interment sites. It is estimated that construction of the new structures would occur over an approximately 40-year period, from 2011 to 2050. The sale of interment sites would occur through year 2050 and beyond.

(1) Facilities and Equipment

Although the Project would increase the number of structures and interment sites within the Forest Lawn Memorial-Park - Hollywood Hills property, it is not anticipated to increase the level of interment activity or number of daily visitors at the Project Site. As noted in Section IV.J, Traffic, Circulation and Parking, of this Draft EIR, the average number of daily interments at the Forest Lawn Memorial-Park - Hollywood Hills property has been approximately the same for the last 13 years. Likewise, the death rate in Los Angeles County has remained relatively unchanged for many years. Therefore, the level of daily interment activity is expected to remain stable over the life of the Project, as it has been for the last 13 years. Even if the death rate in Los Angeles County were to increase, the average number of daily interments at the Memorial-Park would not substantially increase, due to existing logistical constraints at the facility. As such, the Project would not result in an increase for calls for fire protection services and would not necessitate the need for additional staffing or equipment. As discussed above, the LAFD has indicated that existing staffing and resources are currently adequate to meet the demand for fire and EMS services in the Hollywood Community Plan Area. For these reasons, with respect to equipment and personnel, the Project is not anticipated to adversely affect the demand for fire protection services at the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(2) Fire Flows

As discussed above and in Section IV.K.2, Utilities – Water, of this Draft EIR, domestic and fire water flow for the existing uses on the Project Site is provided via a low-pressure, 24-inch domestic water main located in Forest Lawn Drive. This main can supply approximately 5,000 gpm. There is also a high-pressure, 8-inch domestic water main in Forest Lawn Drive that can supply approximately 1,260 gpm fire flow and 400 gpm domestic flow. As an Interim Project, the Applicant is in the process of installing a new high pressure water service line and approximately 1,130 linear feet of pipe. This project was permitted in 2007 and is planned to be completed in early 2011. In addition, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve both the fire and domestic water flow and pressure. Together, these projects are anticipated to improve fire flow pressure on the Project Site.

As previously noted, City-established fire flow requirements generally vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas. In addition, a minimum residual water pressure of 20 PSI is typically required to remain in the water system while the required gpm is flowing. As discussed above, the LADWP is designing a potable water trunk line along Forest Lawn Drive to

replace the existing line. This replacement is scheduled to be built and operational in late 2013 (prior to the construction of the majority of the Project's improvements) and will also improve both the fire and domestic water flow and pressure.

Additionally, the specific fire flow requirement for the Project would be established by the LAFD during its review of building permits. The Water Operations Division of the LADWP would also perform a fire flow study at the time of permit review in order to ascertain whether further water system or site-specific improvements would be necessary. If existing water mains and/or existing hydrants along the Project frontage are determined to be inadequate at the time of Project development, the LAFD would require improvements as part of the Project permitting process. For these reasons, with respect to fire flow, the Project is not anticipated to adversely affect fire flow at the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(3) Emergency Response

As noted above, the Project Site is located outside the maximum response distance standard set forth in Section 57.09.07A of the LAMC. The LAFD has indicated that the response distance and response time to the Project Site from the nearest fire stations do not meet the LAFD's desired response standards. Nonetheless, the LAFD has indicated that existing staffing and resources are considered adequate to meet the Project area's proposed demand for fire and EMS services because the Project Site's demand for fire protection services is unique for several reasons.[6] For example, the Forest Lawn Memorial-Park - Hollywood Hills property is a low-density, low-intensity cemetery land use that employs relatively few employees as compared to other commercial, retail, or service uses of comparable size. In addition, the majority of the Memorial-Park's active uses are located outdoors where there is no potential for structure fire. The Project Site would retain these characteristics with implementation of the Project. The majority of the structures proposed under the Project are non-occupiable structures for such uses as burial gardens, wall crypts and columbaria and are required to be constructed with non-flammable building materials such as concrete, masonry and stone. As shown in Figure II-10 in Section II, Project Description, of this Draft EIR, the Project's proposed new occupiable floor area (including such structures as a new reception facility, administrative space, and a crematory) would be distributed throughout the 444-acre Project Site, thus reducing the potential for an on-site fire to spread from one structure to another. In addition, as noted in Section IV.J, Traffic, Circulation and Parking, of this Draft EIR, the Project would generate

[6] *Written correspondence from Captain William Wells, Planning Section, LAFD, June 30, 2008.*

negligible (if any) new traffic trips. As such, the Project would not impede emergency response to the Project Site by significantly impacting roadway intersections in the Project vicinity. Finally, all new occupiable flammable structures would be equipped with automatic fire sprinkler systems in accordance with LAMC Section 57.09.07. For these reasons, response distance and response time, while under LAFD standards, would not be anticipated to adversely affect emergency response to the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(4) Wildland Fire Hazards

As noted above, the Project Site is located within a Very High Fire Hazard Severity Zone, as designated by the City of Los Angeles, and as such, is subject to brush clearance regulations enforced by the LAFD's Brush Clearance Unit. As discussed above, the majority of the structures proposed under the Project (i.e., the non-occupiable floor area for such uses as burial garden structures, wall crypts and columbaria, which comprise approximately 90 percent of the proposed floor area) would be constructed with non-flammable building materials such as concrete, masonry, and stone. Nonetheless, the Project Applicant would be required to consult with the LAFD Brush Clearance Unit to establish site-specific brush clearance requirements at the time building permits are obtained, thereby ensuring that the Project would not create any undue fire hazard. Therefore, the Project would not be anticipated to adversely affect wildland fire hazards at the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

(5) Emergency Access and LAFD Review

The Project proposes to expand the current facilities and develop currently undeveloped areas of the existing 444-acre Forest Lawn Memorial Park—Hollywood Hills property. The Project would not involve the permanent closure of any streets or sidewalks. The Project is not proposing to add new driveways on the streets bounding the Project Site and therefore would not impact site access. Additionally, the Project would not alter the overall internal circulation scheme within the Project Site. As noted above, emergency access is currently available from the main access as well as three subsidiary driveways; after completion of the Project, emergency access will be available from the main entrance as well as one subsidiary driveway. Access to the Project Site, including emergency access, would not change under the Project as compared to existing conditions. As noted in Section IV.J, Traffic, Circulation and Parking, of this Draft EIR, the Project is not expected to result in increased traffic, including at the primary site access location at Memorial Drive, and no off-site roadway improvements are proposed. In addition, during

the plan check process for each new structure, the Project Applicant will be required to submit the proposed plan to the LAFD for review for compliance with applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code. Any requirements identified during the review process would be implemented during Project development, thereby ensuring that the Project would not create any undue fire hazard. Therefore, the Project would not be anticipated to adversely affect emergency access to the Project Site to the extent that a new fire station or the expansion, consolidation or relocation of an existing facility would be required to maintain service. Accordingly, impacts would be less than significant, and mitigation is not required.

3. Cumulative Impacts

Implementation of the Project in combination with the related projects would increase the demand for fire protection services from fire stations that serve the Project Site. Specifically, there would be increased demands for additional LAFD staffing, equipment, and facilities by 2050. The LAFD has stated that existing staffing and resources are currently adequate to meet the demand for fire and EMS services in the Hollywood Community Plan Area, and that existing staffing and resources are considered adequate to meet the Project area's proposed demand for fire and EMS services. Currently there are no plans to expand or replace existing fire stations, or construct new fire stations in the vicinity of the Project Site.

For any commercial related project more than one mile from an LAFD Engine Company, or 1.5 miles from an LAFD Truck Company, LAMC Section 57.09.07 requires the installation of automatic fire sprinkler systems in order to compensate for the additional response distance to combustible structures. Therefore, related projects may be required to install automatic fire sprinkler systems as each of the related projects would be required to consult with LAFD and LADWP during their design phase to establish fire flow requirements for the land uses proposed, and to determine adequacy of existing fire flow infrastructure serving their respective project sites. Any LAFD or LADWP-required upgrades to the water distribution systems serving the related projects would be addressed for each individual related project in conjunction with their project approvals. In addition, each of the related projects would be individually subject to LAFD review and would be required to comply with all applicable fire safety requirements of the LAFD and the City of Los Angeles to adequately mitigate fire protection impacts. If any of the related projects would create demands on fire protection staffing, equipment, or facilities such that a new station would be required, its potential environmental impacts would be addressed in conjunction with the environmental review for that project. Therefore, the proposed Project would not contribute a considerable incremental effect to cumulative fire protection impacts, and cumulative impacts to fire protection services would be less than significant.

4. Mitigation Measures

As summarized in this Section, Project impacts to fire protection service would be less than significant. Accordingly, mitigation measures are not required.

5. Level of Significance After Mitigation

Impacts related to fire protection services would be less than significant.

V. General Impact Categories

A. Summary of Unavoidable Impacts

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant environmental impacts which cannot be avoided. Specifically, Section 15126.2(b) states:

> "Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

Based on the analysis contained in Section IV, Environmental Impact Analysis, of this Draft EIR, implementation of the proposed Project would not result in any significant and unavoidable environmental impacts.

B. Growth-Inducing Impacts

Section 15126.2(d) of the State CEQA Guidelines requires a discussion of the ways in which a proposed project could be growth-inducing. This would include ways in which the project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) requires an EIR to:

> "Discuss the ways in which the proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either

individually or cumulatively. It must not be assumed growth in any area is beneficial, detrimental, or of little significance to the environment."

Growth can be induced or fostered in several general ways listed as follows:

- Direct growth associated with a project;
- Indirect growth created by either the demand not satisfied by a project or the creation of surplus infrastructure not utilized by a project.

1. Direct Growth

The basic purpose of the proposed Project is to provide for additional interment sites and related facilities in order to respond to the existing and increasing demand for interment and funeral resources in the greater Los Angeles area, and, specifically, the demand within the market region for the Forest Lawn Memorial-Park – Hollywood Hills property. Accordingly, the Project proposes to expand current facilities at the Forest Lawn Memorial-Park – Hollywood Hills property in order to provide additional interment capacity and funeral resources to meet the regional demand for interment and to build the memorial park out to its final land capacity. By definition, the Project itself is not considered a growth-inducing impact because it would not include the construction of new housing. Additionally, the Project would not generate increases to population or provide opportunity for substantial growth.

2. Indirect Growth

While the proposed facility expansion would increase certain aspects related to operations (such as public utilities and maintenance), the increase in interment capacity is a necessity to meet the existing demand for interment and accommodate projected growth on a regional level. However, as presented in detail in Section IV.K, Public Utilities, the proposed Project is adequately served by existing infrastructure and utilities, and development of the proposed Project is not anticipated to require extension of urban trunk line infrastructure or expansion of regional service lines. Rather, existing public utilities would be extended on-site as necessary to support the proposed physical improvements within the Project Site. Further, because the Project Site abuts the public open space areas of Griffith Park to the east and south, and Project development would be contained within the Project Site, any additional growth into these abutting areas would be precluded.

C. Impacts Found To Be Less Than Significant

Section 15128 of the State CEQA Guidelines states:

> "An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of the Initial Study."

The City of Los Angeles Planning Department (the City) has determined through the scoping process that the proposed Project would clearly not result in potentially significant impacts related to the environmental topics listed below. Accordingly, these issues were not addressed in detail in the EIR. Upon review of the City's Initial Study Checklist (as adapted from the CEQA Guidelines Appendix G Checklist), it has been determined that there is no substantial evidence that the proposed Project could cause significant environmental effects in the following areas: Agricultural Resources, Mineral Resources, Population and Housing, and Public Services (Police Protection, Schools, Parks, Libraries, Recreational Facilities). Therefore, no further environmental review of these issues is necessary for the reasons described below. For further analysis of each issue, see the Initial Study that was prepared for the proposed Project, which is contained in Appendix A to this Draft EIR.

1. Agricultural Resources

The proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Additionally, the Project Site is not associated with a Williamson Act Contract. Although the Project Site is partially zoned as agricultural land (A1-1XL-H) and residential (RE 40-1), the Extent of Important Farmland Map Coverage maintained by the Division of Land Protection indicates the Project Site is not included in the Important Farmland Category. The majority of the Project Site was approved by the City for cemetery use in 1948 under a conditional use permit. The Project Site does not include any state-designated agricultural lands. Furthermore, there are no agricultural fields located on the Project Site. Therefore, the proposed Project would not convert any farmland to a non-agricultural use, and no impact to agricultural resources would occur.

2. Mineral Resources

No classified or designated mineral deposits of Statewide or regional significance are identified on the Project Site, and the Project Site is not located within a Mineral Resource Zone 2 (MRZ-2) Area. No oil extraction activities have historically occurred or are presently conducted on the Project Site. A surface mine was operated on the Project Site for the extraction of decomposed granite from 1969 to 1994, and subsequently "reclaimed" pursuant to an approved reclamation plan, which currently remains in effect. The proposed Project would not result in the loss of availability of a known mineral

resource that would be of value to the region and the residents of the State. Furthermore, the City of Los Angeles has not identified any mineral resources on the Project Site that would be of value to the region and to the residents of the State. No locally important mineral resources would be impacted by the removal of soil from the Project Site. No impact would occur to mineral resources with implementation of the proposed Project.

3. Population and Housing

The proposed Project involves the expansion of an existing cemetery use and does not involve the development or displacement of any housing units. The Project proposes to expand current facilities at Forest Lawn Memorial-Park - Hollywood Hills in order to provide spaces for interment and funeral resources to meet the regional demand for interment and to build the memorial park out to its final land capacity. No impact with respect to population and housing would occur.

4. Public Services

The proposed Project does not involve the construction of any housing units and thus would not generate any residential population growth. With regard to employment growth, the proposed Project would not generate a substantial number of new employees at the Project Site. The primary purpose of the proposed Project is to increase the capacity of interment sites to extend the operational life of the cemetery. The proposed Project would not increase the intensity of daily operations. As such, employment at the cemetery is not anticipated to increase. Therefore, since the proposed Project would not increase the resident or daytime population at the Project Site, the Project would not increase demands upon the following public services: police protection, schools, libraries, and parks and recreation. No impact with respect to these public services would occur.

D. Significant and Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines states that the "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. . . . Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

1. Irreversible Environmental Changes

The Project would necessarily consume limited, slowly renewable and non-renewable resources, resulting in irreversible environmental changes. This consumption would occur during construction of the Project and would continue throughout its operational lifetime. The development of the Project would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and people to and from the Project Site.

Construction of the Project would require consumption of resources that are not replenishable or which may renew so slowly as to be considered non-renewable. These resources would include certain types of lumber and other forest products, aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone), metals (e.g., steel, copper and lead), petrochemical construction materials (e.g., plastics), and water. Fossil fuels, such as diesel, gasoline and oil, would also be consumed in the use of construction vehicles and equipment.

The commitment of resources required for the type and level of proposed development would limit the availability of these resources for future generations for other uses during the operation of the Project. However, the consumption of natural resources associated with the Project would be of a relatively small scale and would be consistent with regional and local growth forecasts in the City of Los Angeles and the Southern California region. In addition to the consumption of the natural resources identified above, the proposed Project would result in the permanent conversion of raw land to a developed cemetery. Grading activities would require approximately 1,728,00 cubic yards of cut and approximately 1,015,000 cubic yards of fill. The area to be graded includes approximately 70 acres of currently natural area and approximately 75 acres of previously disturbed areas of the Project Site. Approximately 94 acres of the proposed grading area would be developable for cemetery use. The conversion of undeveloped property currently owned by Forest Lawn Memorial-Park Association to developed cemetery land with interment spaces would eliminate some of the biological resources that currently exist on-site and would preclude future use or redevelopment of the property for any other general purpose use.

While Project construction and operation would result in the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resources in the future, the commitment of such resources would be on a relatively small scale and consistent with regional and local growth forecasts and development goals for the area. The loss of such resources would not be highly accelerated when compared to existing conditions. Therefore, although irreversible

environmental changes would result from the Project, such changes would be considered less than significant.

2. Secondary Impacts

To the extent that mitigation measures for the Project have the potential to result in secondary impacts to the environment, those impacts are addressed within the environmental impact analyses contained within Section IV.A through Section IV.L of this Draft EIR. While the Project may require local infrastructure upgrades to maintain and improve water and sewer lines on-site and in the immediate vicinity of the Project Site, the Project would not necessitate roadway improvements or other regional infrastructure improvements that have not otherwise been accounted for and planned for on a regional level. As such, secondary impacts associated with Utilities and Public Services would be less than significant.

VI. Alternatives to the Proposed Project

1. Introduction

The CEQA Guidelines require that EIRs include the identification and evaluation of a reasonable range of alternatives that are designed to reduce the significant environmental impacts of the project while still meeting the general project objectives. As stipulated in Section 21002.1(a) of the CEQA Statute (Public Resources Code):

> *"The purpose of an environmental impact report is to identify the significant effects on the environment of a project, **to identify alternatives to a project**, and to indicate the manner in which those significant effects can be mitigated or avoided." [emphasis added]*

The CEQA Guidelines also set forth the intent and extent of alternatives analysis to be provided in an EIR. Section 15126.6(a) of the State CEQA Guidelines requires an EIR to describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. The discussion of alternatives, however, need not be exhaustive, but rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives that are deemed "infeasible." With regard to feasibility, CEQA Guidelines Section 15126.6(f)(1) states that:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

CEQA Guidelines Section 15126.6(3) requires the analysis of a "No Project" Alternative. In addition, pursuant to the CEQA Guidelines, EIR preparers are encouraged to evaluate whether any of the significant effects of the proposed project would be avoided or substantially lessened by placing the project in another location. Only locations that would avoid or substantially lessen the significant effects of the proposed project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126.6(f)(2)(a)). Of the alternatives analyzed in an EIR, an environmentally superior alternative is to be

designated. If the environmentally superior alternative is the No Project alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.[1]

2. Alternatives Considered and Rejected

Section 15126.6(c) of the State CEQA Guidelines requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination. In accordance with CEQA Guidelines Section 15126.6(f), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts. As stated previously, an EIR only needs to analyze an alternative location that is capable of avoiding or substantially lessening any significant effects of the proposed project. Alternatives that have been considered and rejected as infeasible include:

> **Alternative Site.** The Project proposes the expansion of an existing developed cemetery within its current boundaries. The Forest Lawn Memorial-Park—Hollywood Hills property encompasses approximately 444 acres situated to the south of Forest Lawn Drive in the City of Los Angeles. The majority of the Project Site is permitted as a cemetery pursuant to a CUP issued by the City in 1948, and approximately 30 acres are permitted for cemetery use pursuant to subsequent CUPs. Approximately 4.5 acres are not currently permitted by CUP for cemetery use. Currently, approximately 230 acres (approximately half of the existing property) has been developed. The proposed Project would develop additional interment sites and cemetery-related facilities within the Applicant's existing property. The utilization and development of adjacent contiguous undeveloped portions of the existing cemetery property would enable the Applicant to utilize the existing mortuary, as well as the existing utility and roadway infrastructure and personnel that is already in place serving the existing cemetery. Also, much of the population the Memorial-Park serves is within a 15-mile radius of the existing Memorial-Park, and families tend to prefer to bury their loved ones in proximity to their homes. In addition, as detailed in Appendix K to this Draft EIR, there are several barriers to developing a new memorial park elsewhere, and particularly within the Memorial-Park's service area, including land availability constraints. Specifically, there are few, if any, available parcels of land large enough for development of new cemeteries in the San Fernando Valley area. Cemeteries require land areas of 75 to

[1] *Ibid., Section 15126.6(e)(2).*

150 acres in size as indicated in Appendix K. Residential and commercial development potential pushes land values to $1 million per acre or more. Other large parcels are generally either industrial brownfields with environmental contamination that make them unsuitable for cemetery use. Hillside properties with extensive grading requirements involve similar environmental constraints as reflected in the proposed Project. For these reasons, the expansion of the cemetery at an alternative location within the region was deemed infeasible and environmentally inferior than the selected Project Site.

Alternative Land Uses – Consideration was also given to development of the Project site with alternative land uses such as commercial or residential uses. However, for a number of reasons, such alternative land uses were also rejected. Specifically, the Project Site has been developed and utilized for cemetery uses for approximately 60 years. Thus, given the existing use of the Project Site and its longevity, the most suitable use for the portions of the Project Site proposed for development would be additional cemetery uses rather than alternative uses such as commercial or residential uses. In addition, alternative uses such as residential or commercial uses would result in an overall increase in environmental impacts when compared with the Project. For example, additional peak hour vehicle trips would result from residential and commercial uses, which potentially could result in significant traffic impacts. These increased trips would also generate an increase in operational air quality emissions and noise when compared with the proposed Project. Such uses would also generate an increased demand for domestic water as well as an increase in wastewater generation when compared with the proposed Project. In addition, such alternative land uses would not meet the basic objectives of the Project. Further, the proximity of Griffith Park may result in land use compatibility issues. Thus, alternative land uses such as commercial and residential uses were not considered for further analysis due to their failure to meet most of the basic project objectives, and inability to avoid significant environmental impacts.

3. Project Objectives

Forest Lawn Memorial-Park Association, the Applicant, is a non-profit, mutual benefit corporation and has been providing cemetery services to the Los Angeles region for over 100 years. The basic purpose of the Project is to provide for additional interment spaces and related facilities in order to respond to the projected future demand for interment and funeral resources in the greater Los Angeles area, and, specifically, the demand within the market region for the Hollywood Hills facility. Within a 15-mile radius of the Project Site, which encompasses the vast majority of the demand for interment sites at Forest Lawn Memorial-Park—Hollywood Hills, there are 25 cemeteries with an estimated 280,000 interment sites remaining. As shown in the market study prepared by CBRE Consulting and attached as Appendix K to this Draft EIR, based on current interment rates and projected population growth and death rates for the Los Angeles metropolitan area,

CBRE estimates that much of the remaining interment property in the market area will be depleted in approximately 10 years. Accordingly, the Project proposes to expand current facilities at Forest Lawn Memorial-Park—Hollywood Hills in order to provide spaces for interment and funeral resources to meet the regional demand for interment.

Objectives of the Project include:

1. Provide interment spaces to address the dwindling supply of interment sites in the Los Angeles area and help meet projected demand for interments for the region through 2050 and beyond.
2. Provide various types of interment spaces and mortuary facilities required to meet the needs of various religious, non-religious, ethnic and socio-economic groups, including ground spaces, garden spaces, mausoleums, wall crypts and columbarium spaces.
3. Provide a memorial park facility with the ability to accommodate multiple funeral services simultaneously and provide appropriate circulation, parking and access for families and visitors.
4. Provide sufficient ground property to meet the needs of a variety of religious, non-religious, ethnic and socio-economic groups.
5. Implement construction in a manner that minimizes impacts to the continuing operations of the Memorial-Park and the continuing delivery of interments and funeral services within the Memorial-Park.
6. Implement construction in a manner that reduces environmental impacts consistent with the objectives of providing interment spaces to meet regional demand.
7. Continue to provide facilities and programs for schools, religious institutions and other organizations and the public at large at the Memorial-Park, consistent with the overall use of the Memorial-Park.
8. Provide areas for additional historical and inspirational works of art for the benefit of the community within the Memorial-Park.

4. Overview of Alternatives to the Proposed Project

For purposes of satisfying Section 21002.1(a) of the Public Resources Code, this Draft EIR considers a total of five alternatives to the proposed Project to facilitate informed decision-making in accordance with Section 15126.6 of the State CEQA Guidelines. As noted above, an alternative location for the Project has been rejected as infeasible; thus, all of the alternatives analyzed are on the Project Site.

As discussed in Chapter IV, Impact Analysis, of this Draft EIR, the Project would not result any significant environmental impacts after implementation of mitigation measures. Thus, this analysis evaluates alternatives that would reduce overall development to examine whether the less than significant impacts associated with the Project could be further reduced. Specifically, given that most of the proposed Project development would occur within the undeveloped portions of the existing cemetery property in the Hollywood Hills, each of the alternatives evaluated herein include reductions in the amount of cemetery development proposed in the undeveloped portions of the Project Site based on the preservation of several of the on-site potentially jurisdictional drainages.[2] The reduced project alternatives are thus identified based on the primary drainage(s) preserved under each of the alternatives.

Analysis of the alternatives is also influenced by design principles relating to cemetery development. For example, in general, the maximum ground slope for regular cemetery ground internment areas is designed to be 20% or less to provide a safe walking surface for visitors, particularly elderly persons, and casket bearers as well as safe access for internment and maintenance equipment and crews in all weather conditions. Generally, the minimum ground slope for regular cemetery ground internment spaces is also designed to be greater than two percent to provide adequate drainage of turf areas. Slopes of roadways are generally ten percent or less to allow safe ingress and egress to parked vehicles by visitors, particularly elderly persons, and to safely move caskets to and from funeral coaches. In addition, parallel and interconnected roadway patterns are needed to provide alternate routes around funeral services and allow for uncongested arrival and departure of vehicles for funeral services without the need to execute u-turns.

The Project Site lies primarily within the Sennett Creek watershed, and Sennett Creek (also referred to herein as Drainage A) enters the property from the east, originating within the Royce's Canyon area of Griffith Park. There are ten tributaries to Sennett Creek within the Project Site, identified herein as Drainages B through K, and M. Drainage L, which is located along the western boundary of the Project Site, is the only drainage on-site not associated with the Sennett Creek watershed. All alternatives preserve Drainage A (Sennett Creek) and Drainage L. The alternatives examine a range of options with regard to the remaining drainages (Drainages B through K, and Drainage M)

The ten Sennett Creek tributaries on the Project Site vary in terms of functional and biological value and level of disturbance. The four largest drainages on the Project Site are

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[2] *"Jurisdictional areas" as referred to in this analysis are the potential California Department of Fish and Game jurisdictional streambeds and potential Army Corps of Engineers jurisdictional waters within the Project Site.*

Sennett Creek (Drainage A), Drainage D, Drainage F, and Drainage H, and these four streams support the most diverse and least disturbed biological resources on the Project Site. At the recommendation of U.S. Army Corps of Engineers staff, a functional assessment (a modified California Rapid Assessment Method, or CRAM) was performed to document these four highest value streams on-site within the Sennett Creek watershed. Refer to Section IV.C., Biological Resources, for a summary of this assessment.

In recognition of the functional value of the various streams on the Project Site, the alternatives analysis analyzes several different scenarios to further develop the cemetery property while preserving some of the more biologically valuable drainages and potentially reducing environmental impacts in other issue areas. As with the proposed Project, all of the alternatives would preserve Sennett Creek (Drainage A). Drainage L would also be preserved under both the Project and all of the Alternatives. The restoration and creation of habitat along Drainage L, which is heavily disturbed, would be included as part of the proposed Project and the reduced project alternatives (Alternatives 2, 3, and 4). The alternatives analyzed in this Draft EIR include:

- Alternative 1: No Project Alternative;
- Alternative 2: Reduced Project with Preservation of Drainages D and D1;
- Alternative 3: Reduced Project with Preservation of Drainages D, D1, F, and F1;
- Alternative 4: Reduced Project with Preservation of Drainages D, D1, F, F1, and H;
- Alternative 5: No Federal Action – Reduced Project with Preservation of all Army Corps Jurisdictional Areas.

Each of these alternatives is described and evaluated below. The focus of Alternatives 2 through 5 is to evaluate possible reductions in the Project's less than significant impacts through the preservation of various Army Corps of Engineers and California Department of Fish and Game jurisdictional areas. Each of these alternatives results in an incremental reduction of developable areas and a loss of new interment spaces. Alternative 5 represents an approximate 25 percent reduction in new interment spaces. Also, each alternative provides for modifications to grading quantities and export requirements. These alternatives provide an analytic tool to evaluate the less than significant environmental impacts associated with the Project and each alternative and to compare the losses of interment spaces and developable area.

5. Analysis Format

In accordance with CEQA Guidelines Section 15126.6(d), each of the above alternatives is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the proposed

Project. As noted previously, the Project would not result in any significant environmental impacts after implementation of mitigation measures. Thus, this analysis evaluates alternatives that would reduce overall development to examine whether the less than significant impacts associated with the Project could be further reduced. Furthermore, each Alternative is evaluated to determine whether the Project objectives, identified above, would be substantially attained by the alternative.[3] The evaluation of each of the alternatives follows the process described below:

a. The net environmental impacts of the alternative after implementation of reasonable mitigation measures are determined for each environmental issue area analyzed in the EIR.

b. Post-mitigation significant and non-significant environmental impacts of the alternative and the proposed Project are compared for each environmental issue area. Where the net impact of the alternative would be clearly less adverse or more beneficial than the impact of the proposed Project, the comparative impact is said to be "less." Where the alternative's net impact would clearly be more adverse or less beneficial than the proposed Project, the comparative impact is said to be "greater." Where the impacts of the alternative and proposed Project would be roughly equivalent, the comparative impact is said to be "similar."

c. The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose and basic Project objectives are substantially attained by the alternative.

Table VI-2 on page VI-63 provides a summary matrix that compares the impacts of the proposed Project with the impacts of each of the analyzed alternatives by environmental issue. In addition, in order to evaluate each alternative's ability to meet the basic Project objectives to provide sufficient interment spaces to serve the Los Angeles community through 2050 and to provide a range of interment spaces (including ground spaces as well as other types of built interment property), an analysis was undertaken of the total developable area, usable area, ground spaces, and built spaces that would occur under each alternative. This analysis is presented in Table VI-1 on page VI-8. Usable acreage as set forth in Table VI-1 is the area that could be used for cemetery development, including interments, buildings, and roadways. Developable acreage is the area that would be used for interment under each alternative, and it is a subcategory of usable acreage. Support acreage is also a subcategory of usable acreage, and it represents area that would be used for roadways and non-interment buildings. Unusable acreage is the area under each alternative that would be used for graded slopes, sediment traps, and basins.

[3] *Ibid., Section 15126.6(c).*

Table VI-1
Overview of Grading, Acreage, Interment Spaces, and Jurisdictional Areas by Alternative

	Proposed Project	No Project Alternative	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Total Acreage	147	Not Applicable[a]	144	135	133	106
Total Cut (cubic yards)	1,728,000	Not Applicable[a]	1,740,000	1,675,000	1,685,000	1,192,000
Total Fill (cubic yards)	1,015,000	Not Applicable[a]	978,000	869,000	817,000	581,000
Stockpile/Net Export Amount (cubic yards)	713,000	Not Applicable[a]	762,000	806,000	868,000	611,000
Usable Acreage	110	Not Applicable[a]	108	104	103	84
Unusable Acreage	36	Not Applicable[a]	35	30	29	20
Developable Acreage	94	Not Applicable[a]	93	90	89	73
Support Acreage	16	Not Applicable[a]	16	15	14	11
Built Interment Spaces[b]	91,464	Not Applicable[a]	88,568	86,887	87,447	63,845
Ground Interment Spaces[b]	108,150	Not Applicable[a]	105,930	102,630	101,040	85,755
Total Spaces[b]	199,614	Not Applicable[a]	194,498	189,517	188,487	149,600
Impact on jurisdictional "waters of the U.S." (acres)	2.37	0	2.06	1.76	1.54	0
Impact on CDFG-designated "streambeds" (acres)	7.94	0	6.46	4.85	4.15	0.37

[a] *Under the No Project Alternative ongoing operational activities and interim projects would continue. Forest Lawn would continue to build out small areas of the Memorial-Park incrementally and add on to existing wall crypts, columbaria, and garden areas as additional burial spaces are needed as permitted under the existing CUPs. However, the No Project Alternative would not include any development within potentially jurisdictional areas of the Project Site that would require discretionary approvals.*

[b] *In addition to these interment spaces, approximately 7,000 built spaces and additional ground spaces would also be developed within existing developed areas of the cemetery.*

Source: Forest Lawn Memorial Park Association, 2010.

VI. Alternatives to the Proposed Project

A. Alternative 1 – No Project Alternative

As indicated above, CEQA requires that every EIR include an analysis of a No Project Alternative. The purpose of analyzing a No Project Alternative is to allow decision-makers to compare the impacts of the proposed Project with those impacts that would otherwise occur in the absence of the proposed Project (State CEQA Guidelines Section 15126.6(e)(1)). Pursuant to State CEQA Guidelines Section 15126.6(e)(2):

> The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved, based on current plans, and consistent with available infrastructure and community services.

The existing environmental conditions are discussed in detail in each respective section of Chapter IV, Environmental Impact Analysis, of this Draft EIR. As discussed in Section II. Project Description, Summary of Environmental Baseline Conditions, the Project Site is currently developed with approximately 628,000 square feet of structural floor area, including approximately 108,000 square feet of occupied floor area and approximately 520,000 square feet of non-occupiable structures, including garden areas, wall crypts, and mausoleums, which do not count as floor area.

The interment spaces in the developed portion of the cemetery are predominantly ground spaces. This reflects the long-term religious and cultural traditions of the Los Angeles community. Although some growth in built spaces (wall crypts, columbaria, mausoleums, etc.) as a percentage is expected to occur over time, it is anticipated that ground space will continue to be the dominant form of interment. (Additional information regarding the critical role of religion, culture and tradition with respect to the type of interment facilities required is presented in Appendix L to this Draft EIR).

The developed portion of the Project Site includes an administration office, a mortuary and flower shop, a chapel, storage, garage and maintenance buildings, the Church of the Hills, the Cremation Garden Columbaria, the Hall of Liberty Auditorium and Museum, Old North Church, outdoor mausoleums, garden areas, interment sites, statues and monuments, as well as landscaping and paved roadways. In addition to the existing developed areas of the Project Site described above, additions and changes on the Forest Lawn Memorial-Park—Hollywood Hills property are anticipated to occur as part of Forest

Lawn's on-going operations at the Project Site. These interim projects include additions to the existing administration and mortuary building, additions to the Courts of Remembrance wall crypts and columbaria and the Gardens of Heritage, removal of existing maintenance buildings, use of a haul route permit to address ongoing grading and soil management operations, and construction of a new debris basin near Forest Lawn Drive.

These baseline conditions, along with the ongoing operational activities at the Forest Lawn Memorial-Park—Hollywood Hills property, and the additional foreseeable development that could occur under existing entitlements, form the basis of the No Project Alternative. Under the No Project Alternative, further development of the Project Site could occur under the existing Conditional Use Permits that apply to most of the Project Site, and it is assumed that Forest Lawn would continue to build out small areas of the Memorial-Park incrementally and add on to existing wall crypts, columbaria, and garden areas as additional burial spaces are needed. However, the No Project Alternative would not include any development within potentially jurisdictional areas of the Project Site that would require discretionary approvals from the California Department of Fish and Game or the Army Corps of Engineers. Thus, all of the potentially jurisdictional drainages on-site would remain in their current state under the No Project Alternative. In addition, restoration of Drainage L would not occur.

1. Environmental Impact Analysis

a. Aesthetics

(1) Visual Character and Viewsheds

Under the No Project Alternative, the existing visual character would generally remain on the Project Site. Photographs depicting the aesthetic characteristics of the Project Site and immediately surrounding area are shown in Figures IV.A-1 through IV.A-15 in Section IV.A, Aesthetics. Further, Figure II-4, Existing Conditions With Interim Projects Site Plan 2008-2011, in Section II. Project Description, illustrates the baseline condition of the Project Site. The visual character and quality of the Project Site and its surroundings would only be altered to the extent that additional cemetery development authorized under the existing Conditional Use Permits occurs. Thus, under the No Project Alternative, existing conditions on the Project Site may be changed with the addition of new cemetery structures and landscaped areas, including the development of currently undeveloped areas, similar to the proposed Project and consistent with the existing land use. However, as development that would occur under the No Project Alternative would not substantially alter, degrade, or eliminate the existing visual character of the area and would not obstruct valued views, potential impacts under this Alternative and the proposed Project would be less than significant. Due to the reduction in area to be developed, potential aesthetics impacts would be less than under the proposed Project.

(2) Light and Glare

Under the No Project Alternative, light and glare would only be altered to the extent that such lighting would be required for the additional cemetery development authorized under the existing Conditional Use Permits. Since this new lighting would not result in a substantial change in ambient illumination levels, potential light and glare impacts would be less than significant and would be similar to the proposed Project.

b. Air Quality

Although there would be grading and hauling under the No Project Alternative in connection with additional cemetery development authorized by the existing Conditional Use Permits, the 15-year grading plan proposed under the Project would not occur under the No Project Alternative. Thus, potential construction-related air quality impacts would likely be less under the No Project Alternative than under the proposed Project, although the Project includes proposed project design features that would reduce the Project's potential air quality impacts to a less than significant level.

Regional air pollutant emissions associated with operations under the No Project Alternative would be generated by the consumption of electricity and natural gas associated with future projects. Under this Alternative, the proposed occupiable square footage would be reduced when compared with the proposed Project. With this reduction in overall occupiable square footage, area and stationary sources would generate operational pollutant emissions that would be reduced when compared with those of the proposed Project. Like the proposed Project, the total contributions to regional emissions under this Alternative would remain less than significant for regional and localized air quality impacts.

Greenhouse gas emissions are determined primarily by daily vehicle trips generated and energy consumption from proposed land uses. Like the Project, trip generation under the No Project Alternative would be expected to continue to be stable through the year 2050. Due to the reduction in occupied structures that would be developed, energy consumption and water usage would be reduced compared to the proposed Project. Thus, greenhouse gas emissions would also be reduced under this Alternative. Like the Project, impacts to greenhouse gas emissions under this Alternative would also be less than significant.

c. Biological Resources

The No Project Alternative would not affect Army Corps jurisdictional "waters of the U.S.," California Department of Fish and Game jurisdictional "streambeds," or associated vegetation communities, regulatory status plants, regulatory status animals, or protected

trees within the potentially jurisdictional areas on the Project Site. Thus, the No Project Alternative's potential impacts to biological resources would be less than the proposed Project's impacts, which would be less than significant with mitigation. However, the No Project Alternative would not include the restoration of existing habitat, including the enhancement of Drainage L proposed as part of the Project. Thus, the No Project Alternative would be less beneficial with respect to enhancing biological resources on-site. However, potential impacts on biological resources under the No Project Alternative would be considered less than under the Project.

d. Cultural Resources

(1) Historic Resources

Under the No Project Alternative, continuation of the existing conditions with implementation of the additional cemetery development authorized under the existing entitlements would occur on the Project Site. The potential historic resources on the Project Site are within the existing developed cemetery. As with the proposed Project, development that would occur under the No Project Alternative would not reduce the integrity or significance of important resources within the Project Site or in the vicinity. Thus, potential impacts with respect to historic resources under the No Project Alternative would likely be the same as under the proposed Project.

(2) Archaeological and Paleontological Resources

Under the No Project Alternative, continuation of the existing conditions with additional cemetery development authorized under the existing entitlements would occur on the Project Site. As this Alternative may include additional site grading or excavation beyond the developed cemetery portions of the Project Site, this Alternative would have a potential for impacts on archaeological and paleontological resources, although it would affect less of the currently undeveloped areas of the Project Site as compared to the proposed Project. Thus, impacts with respect to archaeological and paleontological resources under the No Project Alternative would also be less than significant, but less than the proposed Project.

e. Geology/Soils

Under the No Project Alternative, existing conditions would remain and additional cemetery development authorized under the existing entitlements would be constructed. With additional construction, grading and excavation, there could be potential impacts associated with grading, excavation, erosion, topsoil, groundwater, or geologic hazards under the No Project Alternative, as with the proposed Project. However, similar to the proposed Project, adherence to applicable building and municipal codes would reduce

potential geology and soils impacts to a less than significant level. While this Alternative and the proposed Project would both be required to comply with applicable local, State, and federal regulations associated with geology and soils, the amount of soil disturbance and construction related activities would be decreased under this Alternative. Accordingly, potential impacts associated with geology and soils would be slightly reduced under this Alternative when compared with the proposed Project.

f. Hazardous Materials/Risk of Upset

Under the No Project Alternative, existing conditions would remain and additional cemetery development authorized under the existing Conditional Use Permits would occur; however, development of potentially jurisdictional areas within the Project Site would not occur. All activities associated with ongoing cemetery operations and any additional cemetery development under the No Project Alternative would be required to comply with applicable local, State, and federal regulations governing the routine transport, use, or disposal of potentially hazardous materials. In addition, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous materials, or from exposure to a health hazard, in excess of regulatory standards. Therefore, the No Project Alternative would not have the potential to disturb or release any hazardous materials and impacts would be less than significant. While this Alternative and the proposed Project would both be required to comply with applicable local, State, and federal regulations associated with hazardous materials/risk of upset, the amount of soil disturbance and construction related activities would be decreased under this Alternative. Accordingly, potential impacts associated with hazardous materials/risk of upset would be slightly reduced under this Alternative.

g. Hydrology/Water Quality

Under the No Project Alternative, existing conditions would remain and additional cemetery development authorized under the existing Conditional Use Permits would occur; however, development of the potentially jurisdictional areas within the Project Site would not occur. While this Alternative and the proposed Project would both be required to meet water quality standards and waste discharge requirements, and thus result in potential water quality impacts that are less than significant, the amount of overall disturbance and construction related activities would be decreased under this Alternative. Accordingly, impacts associated with hydrology/water quality would be slightly reduced under this Alternative.

h. Land Use/Planning

Under the No Project Alternative, the existing land uses would remain on the Project Site, as with the proposed Project. The majority of the existing Project Site was originally

approved by the City for cemetery use in 1948, and as such, Forest Lawn has operated a cemetery use at this location for approximately 60 years. With the exception of 4.5 acres, all of the Project Site was approved by the City for cemetery use through Conditional Use Permits. Under the No Project Alternative, a Public Benefit Use approval would not be obtained; however, the Memorial-Park would continue to operate and develop further under the existing Conditional Use Permits. Such new development would be compatible with existing use of the Project Site and surrounding area. Land use planning impacts under the No Project Alternative and the proposed Project would both be considered less than significant. However, due to the reduction in development, such impacts would be less under the No Project Alternative.

i. Noise

Under the No Project Alternative, the existing conditions would remain and additional cemetery development authorized under existing entitlements would occur. Although the noise and vibration impacts associated with construction equipment and related activities under the proposed Project would be less than significant with mitigation, the No Project Alternative would result in reduced noise and vibration impacts because the amount of overall disturbance and construction related activities would be less under this Alternative.

j. Traffic/Circulation and Parking

Under the No Project Alternative, existing conditions would remain and additional cemetery development authorized under existing entitlements would occur. Under the No Project Alternative, less development would occur as compared to the proposed Project. Construction related impacts on traffic, circulation and parking would therefore be less than the proposed Project's less than significant impacts. As with the operational traffic impacts evaluated for the proposed Project in Section IV.J, Traffic, Circulation and Parking, trip generation under the No Project Alternative would be expected to continue to be stable through the year 2050. No additional growth in trip generation beyond current levels would be anticipated under the No Project Alternative. Accordingly, traffic impacts under the No Project Alternative would also be less than significant. Thus, both the No Project Alternative and the proposed Project would have less than significant traffic impacts, and traffic impacts under the No Project Alternative would be equivalent when compared to the proposed Project.

k. Public Utilities

(1) Wastewater

Under the No Project Alternative, the combined estimated wastewater flows generated under existing baseline conditions would be approximately 23,031 gallons per day (gpd). As discussed in Section IV.K.1, Utilities, Wastewater, the estimated increase of approximately 4,815 gpd in wastewater flows for the proposed Project is anticipated to be accommodated and impacts would be less than significant. Accordingly, impacts under the No Project Alternative, which would generate reduced wastewater flows, would also be considered less than significant. Similar to the proposed Project, should a secondary line be required at a future date under the No Project Alternative such improvements would be implemented in consultation with the Bureau of Sanitation and no significant impacts would be anticipated. Accordingly, impacts under the No Project Alternative would be less than significant and reduced when compared to the proposed Project.

(2) Water

As shown in Section IV.K.2, Utilities, Water, the total baseline water use is 23,031 gpd. Implementation of the proposed Project would result in an increased demand for water of approximately 4,815 gpd. Adequate water supply exists to serve the proposed Project increased demands. Accordingly, it can be expected that the No Project Alternative's water demand, which would be less, given the lesser amount of cemetery development, would also be accommodated. As an interim project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. In addition, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. In summary, the No Project Alternative would result in less than significant water supply impacts and these impacts would be slightly reduced when compared to the proposed Project.

(3) Electricity

As evaluated in Section IV.K.3, Utilities, Energy Conservation, existing electrical baseline consumption is 2,422,367 kWh/yr. As evaluated in Section IV.K.3, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt-hours per year. The Los Angeles Department of Water and Power would be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Accordingly, it is expected that the electrical demand under the No Project Alternative, which would likely result in less new demand for electricity than the proposed Project, would also be accommodated. In summary, the No Project Alternative would

result in less than significant impacts on electrical demand and such impacts would be reduced when compared to the proposed Project.

(4) Natural Gas

As discussed in Section IV.K.3, Utilities, Energy Conservation, the total existing baseline demand for natural gas is approximately 5,796,917 cubic feet per year or approximately 483,016 cubic feet per month. As stated in Section IV.K.3, the total natural gas usage on the Project Site would increase to approximately 10,040,367 cubic feet per year or 836,697 cubic feet per month with implementation of the Project. The Southern California Gas Company has indicated that the proposed Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed. Accordingly, it is estimated the No Project Alternative's demand for natural gas services, which would likely be less than under the proposed Project, would also be met. Potential impacts under this Alternative with respect to natural gas would be less than significant and such impacts would be reduced when compared to the proposed Project.

(5) Solid Waste

As identified in Section IV.K.4, Solid Waste, the total existing solid waste generation at the Project Site is conservatively estimated to be approximately 2,253 pounds per day. As evaluated in Section IV.K.4, over the lifetime of the proposed Project, approximately 474 additional pounds per day of solid waste would be generated by proposed Project buildings. The total solid waste generation from the Project Site upon Project completion is estimated to be 2,727 pounds per day. Section IV.K.4 demonstrates that the increase in solid waste generation associated with the proposed Project would be accommodated and thus would result in less than significant impacts. Therefore, the No Project Alternative's generation of solid waste, which would likely be less than under the proposed Project, would also result in less than significant impacts. This potential impact would be reduced when compared to the proposed Project.

I. Public Services

(1) Fire Protection

Under the No Project Alternative, existing conditions would remain and additional cemetery development authorized under the existing Conditional Use Permits would occur. Although impacts with respect to fire flow, emergency response, wildland fire hazards, and emergency access would be considered less than significant under the proposed Project, these less than significant impacts would be reduced under the No Project Alternative compared to the proposed Project.

2. Reduction of Significant Environmental Effects

a. Reduction of Significant Project Impacts

The proposed Project would not result in any significant and unavoidable impacts. Comparatively, the No Project Alternative would also not result in any significant and unavoidable impacts. However, while both the No Project Alternative and the proposed Project would avoid significant and unavoidable impacts, the approximate degree of impact could be reduced under the No Project Alternative when compared to the proposed Project in the following issue areas: Aesthetics (Visual Character/Viewsheds), Air Quality, Archaeological and Paleontological Resources, Biological Resources, Geology and Soils; Hazardous Materials/Risk of Upset, Land Use; Hydrology/Water Quality (Construction), Noise, Public Utilities, and Public Services-Fire Protection. However, the proposed Project would improve the quality and uncontrolled operational runoff from the Project Site, and this improvement would not occur under the No Project Alternative.

b. Assessment of Achieving the Project Objectives

The No Project Alternative would not achieve the Project objectives to the extent that the Project would. Although the No Project Alternative would add new interment sites, it would not add the same amount of supply proposed under the Project to help meet regional demand for burial sites. The remaining interment property within the existing cemetery would be depleted sooner than under the proposed Project, and some of the areas of the Project Site that could be used for additional cemetery development would not be utilized. Thus, the Project objectives to help meet the demand for interments and funeral resources for the region through 2050 and beyond, to provide various types of interment spaces and mortuary facilities to meet the needs a broad array of ethnic and socio-economic groups, to provide space to accommodate multiple funeral services simultaneously, to provide sufficient ground property, and to provide areas for additional historical and inspirational works of art would only be partially met.

VI. Alternatives to the Proposed Project

B. Alternative 2 – Reduced Project with Preservation of Drainages D and D1

Alternative 2 would provide additional interment sites and cemetery-related facilities within the Project Site. As shown in Table VI-1 on page VI-8, Alternative 2 would result in approximately 108 acres of usable acreage and approximately 93 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 2 would provide approximately 3,000 fewer built spaces than the proposed Project and approximately 3,000 fewer ground spaces. In addition, Alternative 2 would require approximately 1,740,000 cubic yards of cut, approximately 978,000 cubic yards of fill, and a net export amount of 762,000 cubic yards. This represents a reduction of 29,000 cubic yards of overall grading and an increase of 49,000 cubic yards of export when compared to the proposed Project. Similar to the proposed Project, Alternative 2 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory. Alternative 2 would also include approximately 1,072,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 28,000 square feet as compared to the proposed Project.

Under Alternative 2, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 2 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 2 would conserve two of the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 2 would preserve Sennett Creek (Drainage A), which is a highly complex riparian, shaded riverine system. Alternative 2 would also conserve the Drainage D riverine complex, which has a similar vegetative structure to Sennett Creek but is more isolated from human effects and prior uses. Under Alternative 2, the two other highest value stream segments would be largely eliminated, as with the proposed Project, though Alternative 2 would preserve the uppermost portion (approximately 25%) of Drainage F. Alternative 2 would also conserve other drainage segments, including F1, L6, L8, and M. Portions of Drainages F, I, J, J1, L, L4, and L5 would also be preserved. Similar to the proposed Project, Alternative 2 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

The majority of the grading under Alternative 2 would occur over an estimated 15-year construction period. In addition, this Alternative would also require soil to be exported in connection with grave preparation over the next 40 years, as with the proposed Project. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

The Conceptual Site Plan illustrating the conceptual development upon the completion of Alternative 2 is depicted in Figure VI-1 on page VI-20.

(1) Scale and Massing

The architectural scale and massing of the proposed structures would be similar to the proposed Project and compatible with the existing structures and development on the Project Site.

(2) Proposed Grading and Stockpiling Plan

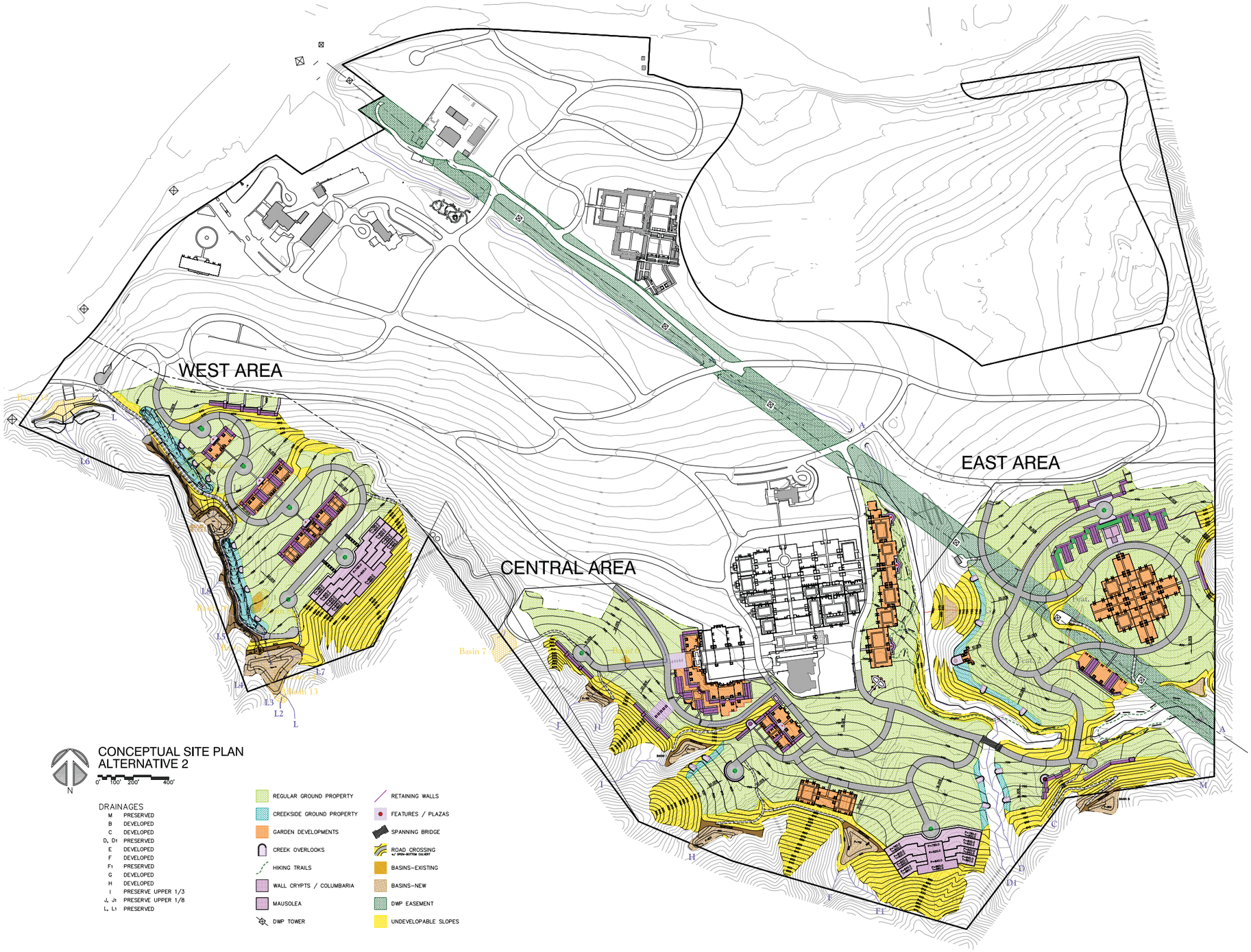
Similar to the proposed Project, the grading plan under Alternative 2 is proposed to be divided into three grading areas and three phases (i.e., Phases 1, 2 and 3). As summarized in Table VI-1 on page VI-8, the proposed improvements under Alternative 2 would affect approximately 144 acres, with approximately 108 acres of [net] usable area. As compared to the proposed Project, this Alternative would result in a decrease in usable and developable areas and a slight decrease in overall grading quantities.

As with the proposed Project, the majority of the grading under Alternative 2 would occur in Phase 1 (Central Area Grading). As part of Phase 1, soil would be stockpiled in the West Grading Area and/or transported off-site. Phase 2 would involve grading in the East Area with soil exported off-site and/or stockpiled in the West Grading Area. Phase 3 would involve grading in the West Area of the Project Site with soil stockpiled and/or transported off-site. The export of soil during the Project would be dependent upon market conditions and construction sites looking for suitable soil for fill material become available.

As with the proposed Project, under Alternative 2, two haul route permits would be needed to export the soil generated by grading activities during the grading period and also to export soil over the next 40 years in connection with grave preparation.

(3) Landscaping

Full buildout of Alternative 2 would add approximately 93 acres of developable area within the Project Site and would include built property and ground property including



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure VI-1
Alternative 2
Reduced Project with Preservation of Drainages D and D1

lawns, ground cover, trees and garden areas. The landscape plan for Alternative 2 would tie into the City's water reclamation line and would use reclaimed water for irrigation.

1. Environmental Impact Analysis

a. Aesthetics

(1) Visual Character and Viewsheds

Under Alternative 2, the Project Site would be developed in a substantially similar manner as the proposed Project. However, Alternative 2 would include approximately 28,000 square feet less of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria) as compared to the proposed Project. Similar to the proposed Project, Alternative 2 would include new construction that would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within Forest Lawn Memorial-Park—Hollywood Hills. While several of the structures could be larger in scale than existing site improvements, given the overall context of Forest Lawn Memorial-Park—Hollywood Hills, as well as the employment of the abovementioned design standards, the structures would remain visually compatible with those uses. In addition, Alternative 2 would also provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. Similar to the proposed Project, Alternative 2 would contribute to the existing visual character of Forest Lawn Memorial-Park—Hollywood Hills, adding cemetery related features, structures and site improvements consistent with the existing land use. Thus, development under this Alternative would not substantially alter, degrade, or eliminate the existing visual character of the area or obstruct valued views. Therefore, impacts under Alternative 2 to visual character and viewsheds would be less than significant and essentially equivalent to the proposed Project.

(2) Light and Glare

Alternative 2 would slightly increase light and glare compared to existing conditions; however the uses that would emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. Similar to the proposed Project, Alternative 2 would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Therefore, light and glare impacts under Alternative 2 would be less than significant and essentially equivalent to the proposed Project.

b. Air Quality

Under Alternative 2, grading activities and building construction activities would decrease slightly in scale compared to the proposed Project since the amount of earthmoving activities and non-occupied floor area under this Alternative would decrease. However, the amount of export of soil would increase slightly in comparison to the proposed Project. As with the proposed Project, this Alternative would generate pollutant emissions through the use of heavy-duty construction equipment and through haul truck and construction worker trips. Pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. The construction emissions generated by this Alternative would be less than those of the proposed Project over the construction period even though this Alternative results in a slight increase in soil export. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and like the proposed Project, would be less than significant for regional and localized construction air quality impacts.

With respect to construction air toxics, diesel particulate emissions represent the greatest potential for TAC emissions. As mentioned previously, the construction duration of this Alternative would decrease slightly in comparison to the proposed Project resulting in a slight decrease of diesel particulate emissions. As with the proposed Project, construction-related air toxic emission impacts during construction of this Alternative would be less than significant.

Similar to the proposed Project, regional air pollutant emissions associated with Alternative 2 operations would be generated by the consumption of electricity and natural gas. Under Alternative 2, the proposed occupiable square footage would be the same as under the proposed Project. With this similar increase in overall square footage, area and stationary sources would generate operational pollutant emissions that would be similar to those of the proposed Project. Like the proposed Project, the total contributions to regional emissions under this Alternative would also remain less than significant for regional and localized air quality impacts.

With respect to potential air toxic impacts, this Alternative would also avoid locating air toxic emitting sources and sensitive receptors within siting distances identified by SCAQMD and ARB guidelines. Thus, similar to the proposed Project, this Alternative would result in a less than significant air quality impact related to air toxics. Such impacts would be similar to those of the proposed Project.

Greenhouse gas emissions are determined mainly by daily trips generated and energy consumption from proposed land uses. Like the Project, trip generation under

Alternative 2 would be expected to continue to be stable through the year 2050. Due to the similar amount of occupiable structures proposed, this Alternative would generate similar energy consumption and water usage compared to the proposed Project, which would lead to similar amounts of greenhouse gas emissions. It is assumed that similar Project Design Features promoting sustainability would be incorporated. Thus, impacts to greenhouse gas emissions under this Alternative would also be less than significant.

c. Biological Resources

With the preservation of some of the drainages on the Project Site, particularly the biologically valuable Drainages D and D1, Alternative 2 would affect fewer of the biological resources on the Project Site. Alternative 2 would impact 2.06 acres of jurisdictional "waters of the U.S.," which is less than the 2.37 acres that would be affected under the proposed Project; 6.46 acres of CDFG-designated "streambeds," which is less than the 7.94 acres that would be affected under the proposed Project; and 67.06 acres of vegetation communities, which is 3.36 acres less than the natural vegetation communities affected by the proposed Project. Alternative 2 would impact 665 protected trees, which is less than the 835 protected trees that would be impacted by the proposed Project. With implementation of the mitigation applicable to the proposed Project, impacts to biological resources under Alternative 2 would be reduced to a less than significant level, and would be reduced when compared to the proposed Project.

d. Cultural Resources

(1) Historic Resources

Since the potential historic resources on the Project Site are within the existing developed cemetery, and Alternative 2 would include the same type of development within the existing developed cemetery as the proposed Project, potential impacts with respect to historic resources under Alternative 2 would be the same as under the proposed Project (less than significant).

(2) Archaeological and Paleontological Resources

Under Alternative 2, the Project Site would be developed and disturbed in approximately the same manner and extent as the proposed Project. While Alternative 2 would make alterations to grading within drainage areas, and thus, would alter some soil export and stockpiling plans, the overall demolition, construction, grading and development of the uses for Alternative 2 would comply with all applicable laws and regulations governing the discovery of archaeological materials and human remains. However, due to the reduction of area to be graded, the potential for uncovering of archeological and paleontological resources would be reduced when compared with the proposed Project.

Thus, impacts with respect to archaeological and paleontological resources under Alternative 2 would be less than significant with mitigation and less when compared with the proposed Project.

e. Geology/Soils

Under Alternative 2, the Project Site would be developed and constructed in a similar manner as the proposed Project. All structures and proposed uses under Alternative 2 would be constructed in conformance with the applicable building code design parameters. As shown in Table VI-1 on page VI-8, Alternative 2 would have approximately three less acres of graded area and approximately one less acre of developable area compared to the proposed Project. Thus, impacts associated with landform alteration would be somewhat reduced when compared with the Project. While Alternative 2 would make alterations to grading within drainage areas, and thus, would alter some soil export and stockpiling plans, the approximate volume of construction, grading and excavation would not exceed that identified for the proposed Project; thus, impacts associated with sedimentation and erosion would be similar to the Project and would be less than significant. As the general location of Alternative 2 would be the same as that of the proposed Project, the threat of fault rupture and seismic shaking would also be the same. Thus, potential impacts relating to geologic hazards under Alternative 2 would be less than significant and essentially equivalent when compared to the proposed Project.

f. Hazardous Materials/Risk of Upset

Similar to the proposed Project, all activities associated with Alternative 2 would be required to comply with applicable local, State, and federal regulations governing the routine transport, use, or disposal of potentially hazardous materials. In addition, if impacted soils or structures such as underground storage tanks are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, Alternative 2 would not have the potential to disturb or release any hazardous materials and impacts would be less than significant. This impact would be essentially equivalent to that of the proposed Project.

g. Hydrology/Water Quality

Under Alternative 2, the Project Site would be developed in a substantially similar manner as the proposed Project with alterations and improvements to drainage areas. Similar to the proposed Project, Alternative 2 would be designed and developed in a manner that ensures water quality standards are met. This includes, but is not limited to: the handling, storage and disposal of construction materials containing pollutants; the maintenance and operation of construction equipment; and earth moving activities which,

when not controlled, may generate soil erosion and transportation via storm runoff or mechanical equipment and subsurface activities which can release chemicals into groundwater. Like the proposed Project, Alternative 2 would also be required to meet water quality standards and waste discharge requirements. In addition, the amount of overall disturbance and construction related activities under Alternative 2 would be approximately the same as the proposed Project. However, as described above in Figure VI-1, development in the undeveloped portions of the Project Site under Alternative 2 would be altered to avoid some of the potentially jurisdictional drainages. Alternative 2 would also preserve the natural drainage systems in those areas. Accordingly, impacts associated with hydrology/water quality under Alternative 2 would be less than significant, as with the proposed Project, and reduced when compared to the proposed Project.

h. Land Use/Planning

Under Alternative 2, the Project Site would be developed with the same type of land uses and in approximately the same manner as the proposed Project. While Alternative 2 would include a reduction in non-occupied square footage, this Alternative would still include the discretionary request for a Public Benefit approval. Similar to the proposed Project, with the approval of a Public Benefit entitlement for Alternative 2, the cemetery use would be consistent with the current zoning code, which no longer requires Conditional Use Permits for cemetery use. In addition, Alternative 2 would also be consistent with the various land use policies, plans and regulations identified in Section IV.H, Land Use-Planning. Furthermore, like the proposed Project, development under Alternative 2 would be compatible with existing uses. Accordingly, land use planning impacts under Alternative 2 would be less than significant and essentially equivalent to the proposed Project.

i. Noise

Alternative 2 would result in a reduction of 28,000 square feet of non-occupiable floor area when compared to the proposed Project. However, the approximate volume of construction and future operational levels under Alternative 2 would be substantially similar to the proposed Project. Similar to the proposed Project, the demolition, grading, and construction activities associated with Alternative 2 would include standard construction equipment and practices. As demonstrated in Section IV.I, Noise, the noise and vibration impacts associated with construction equipment and related activities under the similar proposed Project scenario would be less than significant with mitigation. Accordingly, with implementation of the same mitigation measures, these potential impacts under Alternative 2 would also be less than significant and considered essentially equivalent to the proposed Project.

j. Traffic/Circulation and Parking

Under Alternative 2, although a slight increase in export would occur, less development would occur as compared to the proposed Project. Construction related impacts on traffic, circulation and parking would therefore be less than the proposed Project's less than significant impacts. In addition, similar to the operational analysis conducted for the proposed Project in Section IV.J, Traffic, Circulation and Parking, the trip generation under Alternative 2 is expected to continue to be stable through the year 2050. Thus, no additional growth in trip generation beyond current levels is anticipated. Accordingly, operational traffic, circulation and parking impacts under Alternative 2 would be less than significant and essentially equivalent to those that would occur under the proposed Project.

k. Public Utilities

(1) Wastewater

Under Alternative 2, the Project Site would be developed with the same amount of occupiable floor area as the proposed Project (22,500 square feet). As discussed in Section IV.K.1, Utilities, Wastewater, the proposed Project's estimated increase of approximately 4,815 gpd in wastewater flows is anticipated to be accommodated and impacts associated with wastewater capacity would be less than significant. Accordingly, Alternative 2 would also be anticipated to generate 4,815 gpd in increased wastewater flows and this amount would also result in a less than significant impact associated with wastewater capacity. Similar to the proposed Project, should a secondary line be required at a future date, such improvements would be implemented in consultation with the Bureau of Sanitation and no significant impacts would be anticipated. Accordingly, impacts under Alternative 2 would be less than significant and essentially equivalent when compared with the proposed Project.

(2) Water

As shown in Section IV.K.2, Utilities, Water, based on the derived demand rate on the site history for domestic water usage (approximately 214 gpd per 1,000 sf), implementation of the proposed Project would result in an increased demand on water supply services of approximately 4,815 gpd. Adequate water supplies would be available to meet this demand. Accordingly, as Alternative 2 would include the same amount of occupiable floor area and a corresponding same amount of water demand as the proposed Project, water supplies would also be available to meet the demand generated by Alternative 2. In addition, as an interim project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. Furthermore, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest

Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. In summary, Alternative 2 would result in less than significant water supply impacts and these impacts would be essentially equivalent to those that would occur under the proposed Project.

(3) Electricity

As shown in Section IV.K.3, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt-hours per year and the Los Angeles Department of Water and Power would be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Accordingly, as Alternative 2 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), adequate electrical supplies would also be available to serve Alternative 2. Similar to the proposed Project, Alternative 2 would potentially be required to provide an on-site transformer station to supply both the new and existing load. In summary, Alternative 2 would result in less than significant impacts on electrical demand and such impacts would be essentially equivalent to those that would occur under the proposed Project.

(4) Natural Gas

As stated in Section IV.K.3, the proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,881 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,367 cubic feet per year or 836,697 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed. Accordingly, as Alternative 2 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), it is anticipated that the demand for natural gas services would also be met under Alternative 2. Potential impacts under this Alternative with respect to natural gas would thus be less than significant and essentially equivalent to those that would occur under the proposed Project.

(5) Solid Waste

As identified in Section IV.K.4, Solid Waste, over the lifetime of the proposed Project, approximately 474 additional pounds per day of solid waste would be generated by proposed Project buildings. When accounting for existing uses and interim projects, the total solid waste generation upon Project completion is estimated to be 2,727 pounds per day. Section IV.K.4 demonstrates that the increase in solid waste generation associated with the proposed Project would result in less than significant impacts on landfill capacity. Accordingly, as Alternative 2 would include the same amount of occupiable floor area as

the proposed Project, it is anticipated that the total solid waste generation under Alternative 2 would also be accommodated by existing and future landfill capacity. Therefore, impacts on solid waste under Alternative 2 would be less than significant and essentially equivalent to the proposed Project.

l. Public Services

(1) Fire Protection

Similar to the fire protection impacts discussed in Section IV.L, Public Services – Fire Protection, the activities associated with Alternative 2 would be required to comply with all applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code related to: fire flow, emergency response, wildland fire hazards, and emergency access. Accordingly, these impacts would be considered less than significant and essentially equivalent to the proposed Project.

2. Reduction of Significant Environmental Effects

a. Reduction of Significant Project Impacts

The proposed Project would not result in any significant and unavoidable impacts. Comparatively, Alternative 2 would also not result in any significant and unavoidable impacts. However, while all impact categories discussed above for Alternative 2 share the same impact statement with the proposed Project, the approximate degree of impact could be reduced when compared to the proposed Project in the following issue areas: Air Quality (Toxic Air Contaminants during Construction) Archaeological and Paleontological Resources, Geology and Soils (Landform Alteration), Biological Resources, Hydrology/Water Quality, and Traffic (Construction).

3. Assessment of Achieving the Project Objectives

Alternative 2 would provide a lesser amount of new cemetery development and approximately 5,100 fewer interment spaces (a three percent reduction in the number of interment spaces) when compared with the Project. Thus, the Project objectives to help meet the demand for interments for the region through 2050 and beyond, to provide various types of interment spaces and mortuary facilities to meet the needs of a broad array of ethnic and socio-economic groups, to provide space to accommodate multiple funeral services simultaneously, to provide sufficient ground property, and to provide areas for additional historical and inspirational works of art would be met to a slightly lesser degree than the proposed Project. Therefore, Alternative 2 would not match the proposed Project's ability to meet the projected future demand identified for the memorial park facilities and the regional demand for burial space.

VI. Alternatives to the Proposed Project

C. Alternative 3 – Reduced Project with Preservation of Drainages D, D1, F, and F1

Similar to the proposed Project, Alternative 3 would provide additional interment sites and cemetery-related facilities within the Project Site. Under Alternative 3, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 3 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 3 would conserve three of the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 3 would preserve Sennett Creek (Drainage A), a highly complex riparian, shaded riverine system. The Drainage D and Drainage F riverine complexes would also be largely conserved under Alternative 3. The Drainage D and Drainage F riverine complexes have vegetative structures similar to Sennett Creek, but more isolated from human effects and prior uses. Under Alternative 3, the other highest biological value stream segment, Drainage H, would largely be eliminated, as with the proposed Project. Alternative 3 would also conserve other drainage segments, including B, F1, L6, L8, and M. Portions of Drainages I, J, J1, L, L4, and L5 would also be preserved under Alternative 3. Similar to the proposed Project, Alternative 3 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

Alternative 3 would result in approximately 104 acres of usable acreage and approximately 90 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 3 would provide approximately 4,500 fewer built spaces than the proposed Project and approximately 5,500 fewer ground spaces. Alternative 3 would require approximately 1,675,000 cubic yards of cut, approximately 869,000 cubic yards of fill, and a net export amount of 806,000 cubic yards. These grading activities would represent a decrease of approximately 199,000 cubic yards of grading and an increase of approximately 93,000 cubic yards of export when compared to the proposed Project. Similar to the proposed Project, Alternative 3 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 3 would include approximately 1,029,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 71,000 square feet of non-occupied floor area as compared to the

proposed Project. It is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. In addition, this Alternative would require up to 400,000 cubic yards of soil to be exported in connection with grave preparation over this period, as with the proposed Project. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

The Conceptual Site Plan illustrating the conceptual development upon the completion of Alternative 3 is depicted in Figure VI-2 on page VI-31.

(1) Scale and Massing

Similar to the proposed Project, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site.

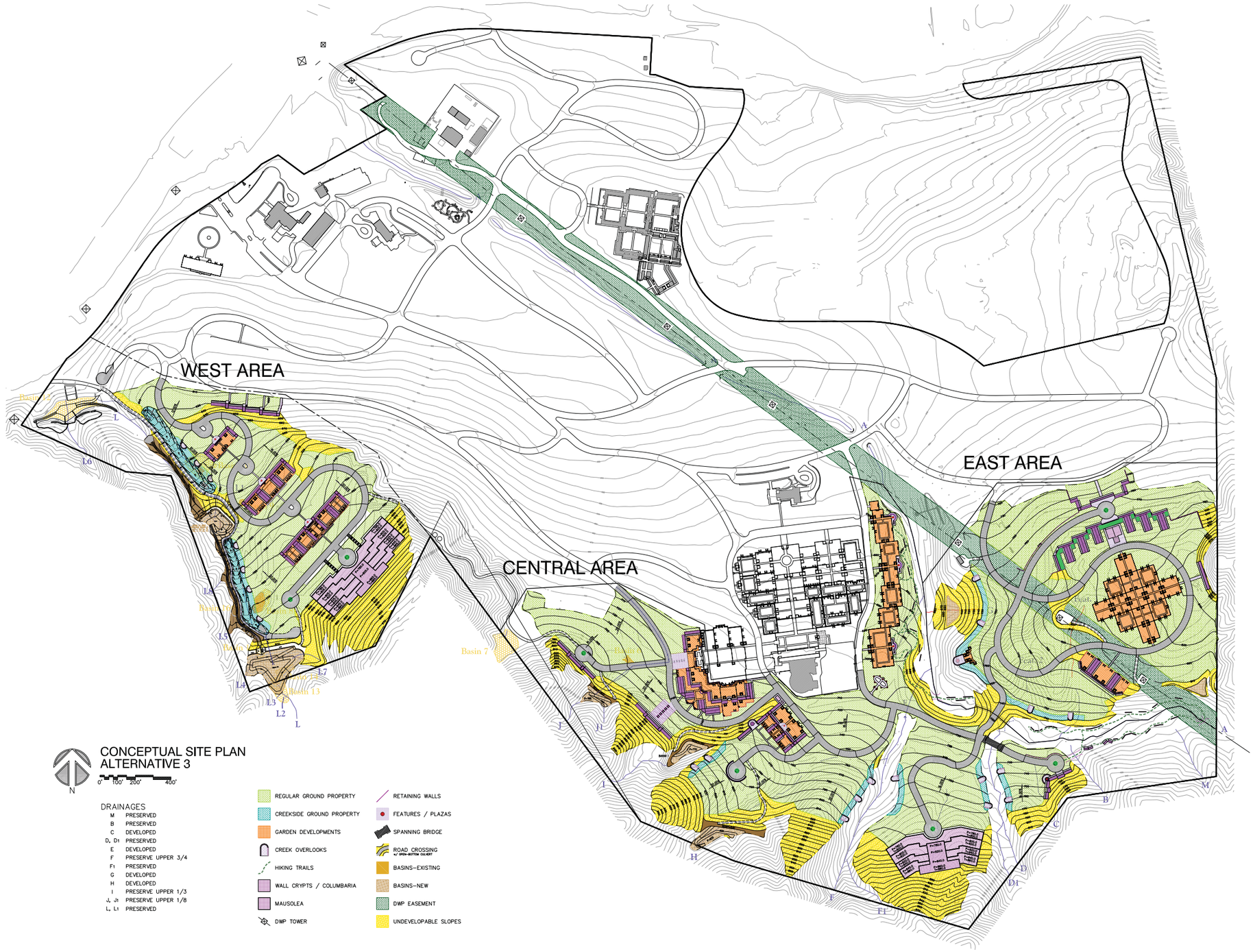
(2) Proposed Grading and Stockpiling Plan

Similar to the proposed Project, the grading plan under Alternative 3 is proposed to be divided into three grading areas and three phases (i.e., Phases 1, 2 and 3). As summarized in Table VI-1 on page VI-8, the proposed improvements under Alternative 3 would affect approximately 135 acres, with approximately 104 acres of net usable area. As compared to the proposed Project, this Alternative would result in a decrease of usable and developable acreage. In addition, while a decrease in the amount of overall grading would occur, an increase in export would occur under Alternative 3.

As with the proposed Project, the majority of the grading under Alternative 3 would occur in Phase 1 with soil exported and/or transported to the West Grading Area. Phase 2 would involve grading within the East Area of the Project Site with soil exported off-site and/or stockpiled in the West Grading Area. In addition, Phase 3 would involve grading in the West Area of the Project Site with soil stockpiled and/or transported off-site. As with the proposed Project, this Alternative would involve export to off-site locations, which would be dependent upon market conditions and construction sites looking for suitable soil for fill material become available.

(3) Landscaping

Buildout of Alternative 3 would include approximately 90 acres of developable area and would include built property and ground property including lawns, ground cover, trees and garden areas. Similar to the existing landscaped areas within the developed portions



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure VI-2

Alternative 3
Reduced Project with Preservation of Drainages D, D1, F, and F1

of the Project Site, the landscape plan for Alternative 3 would tie into the City's water reclamation line and would use reclaimed water for irrigation.

1. Environmental Impact Analysis

a. Aesthetics

(1) Visual Character and Viewsheds

Under Alternative 3, the Project Site would be developed in a substantially similar manner as the proposed Project. However, Alternative 3 would include approximately 71,000 less square feet of non-occupied floor area as compared to the proposed Project. Similar to the proposed Project, Alternative 3 would include new construction that would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within Forest Lawn Memorial-Park—Hollywood Hills. While several of the structures could be larger in scale than existing site improvements, given the overall context of Forest Lawn Memorial-Park—Hollywood Hills, as well as the employment of the abovementioned design standards, the structures would remain visually compatible with those uses. In addition, Alternative 3 would also provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. Similar to the proposed Project, Alternative 3 would contribute to the existing visual character of Forest Lawn Memorial-Park—Hollywood Hills, adding cemetery related features, structures and site improvements consistent with the existing land use. Thus, development under this Alternative would not substantially alter, degrade, or eliminate the existing visual character of the area or obstruct valued views. Therefore, impacts under Alternative 3 to visual character and viewsheds would be less than significant and essentially equivalent to the proposed Project.

(2) Light and Glare

Alternative 3 would slightly increase light and glare compared to existing conditions; however the uses that would emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. Similar to the proposed Project, Alternative 3 would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Therefore, light and glare impacts under Alternative 3 would be less than significant and essentially equivalent to the proposed Project.

b. Air Quality

Under Alternative 3, grading activities and building construction activities would decrease in scale compared to the proposed Project since the amount of earthmoving activities and non-occupied floor area under this Alternative would decrease. However, the amount of export of soil would increase in comparison to the proposed Project. As with the proposed Project, this Alternative would generate pollutant emissions through the use of heavy-duty construction equipment and through haul truck and construction worker trips. Pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities would decrease compared to the proposed Project. The construction emissions generated by this Alternative would be less than those of the proposed Project over the construction period even though this Alternative results in an increase in soil export. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and like the proposed Project, would be less than significant for regional and localized construction air quality impacts.

With respect to construction air toxics, diesel particulate emissions represent the greatest potential for TAC emissions. As mentioned previously, the construction duration of this Alternative would likely decrease in comparison to the proposed Project resulting in a decrease of diesel particulate emissions. As with the proposed Project, construction-related air toxic emission impacts during construction of this Alternative would be less than significant.

Similar to the proposed Project, regional air pollutant emissions associated with Alternative 3 operations would be generated by the consumption of electricity and natural gas. Under Alternative 3, the proposed occupiable square footage would be the same as under the proposed Project. With this similar increase in overall square footage, area and stationary sources would generate operational pollutant emissions that would be similar to those of the proposed Project. Like the proposed Project, the total contributions to regional emissions under this Alternative would also remain less than significant for regional and localized air quality impacts.

With respect to potential air toxic impacts, this Alternative would also avoid locating air toxic emitting sources and sensitive receptors within siting distances identified by SCAQMD and ARB guidelines. Thus, similar to the proposed Project, this Alternative would result in a less than significant air quality impact related to air toxics. Such impacts would be similar to those of the proposed Project.

Greenhouse gas emissions are determined mainly by daily trips generated and energy consumption from proposed land uses. Like the Project, trip generation under Alternative 3 would be expected to continue to be stable through the year 2050. Due to the

similar amount of occupiable structures proposed, this Alternative would generate similar energy consumption, and water usage compared to the proposed Project, which would lead to similar amounts of greenhouse gas emissions. It is assumed that similar Project Design Features promoting sustainability would be incorporated. Thus, impacts to greenhouse gas emissions under this Alternative would also be less than significant.

c. Biological Resources

With the preservation of some of the drainages on the Project Site, particularly the biologically valuable Drainages D, D1, F and F1, Alternative 3 would affect fewer of the biological resources on the Project Site. Alternative 3 would impact 1.76 acres of jurisdictional "waters of the U.S.," which is less than the 2.37 acres that would be affected under the proposed Project; 4.85 acres of CDFG-designated "streambeds," which is less than the 7.94 acres that would be affected under the proposed Project; and 59.54 acres of vegetation communities, which is 10.88 acres less than the natural vegetation communities affected by the proposed Project. Alternative 3 would impact 381 protected trees, which is less than the 835 protected trees that would be impacted by the proposed Project. With implementation of the mitigation applicable to the proposed Project, impacts to biological resources under Alternative 3 would be reduced to a less than significant level, and would be reduced when compared to the proposed Project.

d. Cultural Resources

(1) Historic Resources

Since the potential historic resources on the Project Site are within the existing developed cemetery, and Alternative 3 would include the same type of development within the existing developed cemetery as the proposed Project, potential impacts with respect to historic resources under Alternative 3 would be the same as under the proposed Project (less than significant).

(2) Archaeological and Paleontological Resources

Under Alternative 3, the Project Site would be developed and disturbed in approximately the same manner and extent as the proposed Project. While Alternative 3 would make alterations to grading within drainage areas, and thus, would alter some soil export and stockpiling plans, the overall demolition, construction, grading and development of the uses for Alternative 3 would comply with all applicable laws and regulations governing the discovery of archaeological materials and human remains. However, due to the reduction of area to be graded, the potential for uncovering of archeological and paleontological resources would be reduced when compared with the proposed Project. Thus, impacts with respect to archaeological and paleontological resources under

Alternative 3 would be less than significant with mitigation and less when compared to the proposed Project

e. Geology/Soils

Under Alternative 3, the Project Site would be developed and constructed in a similar manner as the proposed Project. All structures and proposed uses under Alternative 3 would be constructed in conformance with the applicable building code design parameters. As shown in Table VI-1 on page VI-8, Alternative 3 would have approximately 12 less acres of graded area and 4 less acres of developable area compared to the proposed Project. Alternative 3 would make alterations to grading within drainage areas. However, the amount of overall grading would be reduced by approximately 199,000 cubic yards. Thus, impacts associated with sedimentation and erosion and landform alteration would be less than those that would occur under the proposed Project. Like the Project, these impacts would be less than significant. As the general location of Alternative 3 would be the same as that of the proposed Project, the threat of fault rupture and seismic shaking would also be the same. Thus, potential impacts relating to geologic hazards under Alternative 3 would be less than significant and similar when compared to the proposed Project.

f. Hazardous Materials/Risk of Upset

Similar to the proposed Project, all activities associated with Alternative 3 would be required to comply with applicable local, State, and federal regulations governing the routine transport, use, or disposal of potentially hazardous materials. In addition, if impacted soils or structures such as underground storage tanks are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, Alternative 3 would not have the potential to disturb or release any hazardous materials and impacts would be less than significant. This impact would be essentially equivalent to that of the proposed Project.

g. Hydrology/Water Quality

Under Alternative 3, the Project Site would be developed in a substantially similar manner as the proposed Project with alterations and improvements to drainage areas. Similar to the proposed Project, Alternative 3 would be designed and developed in a manner that ensures water quality standards are met. This includes, but is not limited to: the handling, storage and disposal of construction materials containing pollutants; the maintenance and operation of construction equipment; and earth moving activities which, when not controlled, may generate soil erosion and transportation via storm runoff or mechanical equipment and subsurface activities which can release chemicals into

groundwater. Like the proposed Project, Alternative 3 would be required to meet water quality standards and waste discharge requirements. In addition, the amount of overall disturbance and construction related activities would be reduced when compared with the proposed Project. In addition, as described above, development in the undeveloped portions of the Project Site under Alternative 3 would be altered to avoid some of the potentially jurisdictional drainages. Thus, Alternative 3 would also preserve the natural drainage systems in those areas. Accordingly, impacts associated with hydrology/water quality under Alternative 3 would be less than significant, as with the proposed Project, and reduced when compared to the proposed Project.

h. Land Use/Planning

Under Alternative 3, the Project Site would be developed with the same type of land uses and in approximately the same manner as the proposed Project. While Alternative 3 would include approximately 71,000 less square feet of non-occupied floor area, this Alternative would still include the discretionary request for a Public Benefit approval. Similar to the proposed Project, with the approval of a Public Benefit entitlement for Alternative 3, the cemetery use would be consistent with the current zoning code, which no longer requires Conditional Use Permits for cemetery use. In addition, Alternative 3 would also be consistent the various land use policies, plans and regulations identified in Section IV.H, Land Use-Planning. Furthermore, like the proposed Project, development under Alternative 3 would be compatible with existing uses. Accordingly, land use planning impacts under Alternative 3 would be less than significant and essentially equivalent to the proposed Project.

i. Noise

Alternative 3 would result in a reduction of approximately 71,000 square feet of non-occupiable floor area when compared to the proposed Project. However, on a given day, the approximate volume of construction and future operational levels under Alternative 3 would be substantially similar to the proposed Project. Similar to the proposed Project, the demolition, grading, and construction activities associated with Alternative 3 would include standard construction equipment and practices. As demonstrated in Section IV.I, Noise, the noise and vibration impacts associated with construction equipment and related activities under the more intense proposed Project scenario would be less than significant with mitigation. Accordingly, with implementation of the same mitigation measures, these impacts under Alternative 3 would also be less than significant and considered essentially equivalent to the proposed Project.

j. Traffic/Circulation and Parking

Under Alternative 3, less development would occur as compared to the proposed Project. Construction related impacts on traffic, circulation and parking would therefore be less than the proposed Project's less than significant impacts. In addition, similar to the operational analysis conducted for the proposed Project in Section IV.J, Traffic, Circulation and Parking, the trip generation under Alternative 3 is expected to continue to be stable through the year 2050. Thus, no additional growth in trip generation beyond current levels is anticipated. Accordingly, operational traffic, circulation and parking impacts under Alternative 3 would be less than significant and essentially equivalent to those that would occur under the proposed Project.

k. Public Utilities

(1) Wastewater

Under Alternative 3, the Project Site would be developed with the same amount of occupiable floor area as the proposed Project (22,500 square feet). As discussed in Section IV.K.1, Utilities, Wastewater, the proposed Project's estimated increase of approximately 4,815 gpd in wastewater flows is anticipated to be accommodated and potential impacts associated with wastewater capacity would be less than significant. Accordingly, Alternative 3 would also be anticipated to generate 4,815 gpd in increased wastewater flows and this amount would also result in a less than significant impact associated with wastewater capacity. Similar to the proposed Project, should a secondary line be required at a future date, such improvements would be implemented in consultation with the Bureau of Sanitation and no significant impacts would be anticipated. Accordingly, impacts under Alternative 3 would be less than significant and essentially equivalent when compared with the proposed Project.

(2) Water

As shown in Section IV.K.2, Utilities, Water, based on the derived demand rate on the site history for domestic water usage (approximately 214 gpd per 1,000 sf), implementation of the proposed Project would result in an increased demand on water supply services of approximately 4,815 gpd. Adequate water supplies would be available to meet this demand. Accordingly, as Alternative 3 would include the same amount of occupiable floor area and a corresponding same amount of water demand as the proposed Project, water supplies would also be available to meet the demand generated by Alternative 2. In addition, as an interim project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. Furthermore, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will

improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. In summary, Alternative 3 would result in less than significant water supply impacts and these impacts would be essentially equivalent to the proposed Project.

(3) Electricity

As shown in Section IV.K.3, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt-hours per year and the Los Angeles Department of Water and Power would be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Accordingly, as Alternative 3 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), adequate electrical supplies would also be available to serve Alternative 3. Similar to the proposed Project, Alternative 3 would potentially be required to provide an on-site transformer station to supply both the new and existing load. In summary, Alternative 3 would result in less than significant impacts on electrical demand and such impacts would be essentially equivalent to those that would occur under the proposed Project.

(4) Natural Gas

As stated in Section IV.K.3, the proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,888 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,367 cubic feet per year or 836,697 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed. Accordingly, as Alternative 3 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), it is anticipated that the demand for natural gas would also be met under Alternative 3. Impacts under this Alternative with respect to natural gas would be less than significant and essentially equivalent to those that would occur under the proposed Project.

(5) Solid Waste

As identified in Section IV.K.4, Solid Waste, over the lifetime of the proposed Project, approximately 474 additional pounds per day of solid waste would be generated by proposed Project buildings. When accounting for existing uses and interim projects, the total solid waste generation upon Project completion is estimated to be 2,727 pounds per day. Section IV.K.4 demonstrates that the increase in solid waste generation associated with the proposed Project would result in less than significant impacts on landfill capacity. Accordingly, as Alternative 3 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), it is anticipated that the total solid waste

generation under Alternative 3 would also be accommodated by existing and future landfill capacity. Therefore, impacts on solid waste under Alternative 3 would be less than significant and essentially equivalent to the proposed Project.

I. Public Services

(1) Fire Protection

Similar to the fire protection impacts discussed in Section IV.L, Public Services – Fire Protection, the activities associated with Alternative 3 would be required to comply with all applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code related to: fire flow, emergency response, wildland fire hazards, and emergency access. Accordingly, these impacts would be considered less than significant and essentially equivalent to the proposed Project.

2. Reduction of Significant Environmental Effects

a. Reduction of Significant Project Impacts

The proposed Project would not result in any significant and unavoidable impacts. Comparatively, Alternative 3 would also not result in any significant and unavoidable impacts. However, while all impact categories discussed above for Alternative 3 share the same impact statement with the proposed Project, the approximate degree of impact could be reduced when compared to the proposed Project in the following issue areas: Air Quality (Toxic Air Contaminants during Construction), Archeological and Paleontological Resources, Biological Resources, Geology and Soils (Erosion and Landform Alteration), Hydrology/Water Quality, and Traffic (Construction).

3. Assessment of Achieving the Project Objectives

Alternative 3 would provide a lesser amount of new cemetery development and approximately 10,000 fewer interment spaces (a five percent reduction in interment spaces) when compared with the Project. Thus, the Project objectives to help meet the demand for interments for the region through 2050 and beyond, to provide various types of interment spaces and mortuary facilities to meet the needs of a broad array of ethnic and socio-economic groups, to provide space to accommodate multiple funeral services simultaneously, to provide sufficient ground property, and to provide areas for additional historical and inspirational works of art would be met to a lesser degree than the proposed Project. Therefore, Alternative 3 would not match the proposed Project's ability to meet the projected future demand identified for the memorial park facilities and the regional demand for burial space.

VI. Alternatives to the Proposed Project

D. Alternative 4 – Reduced Project With Preservation of Drainages D, D1, F, F1, and H

Similar to the proposed Project, Alternative 4 would provide additional interment sites and cemetery-related facilities within the Project Site. Under Alternative 4, the proposed additions within the developed portion of the Project Site would be the same as under the proposed Project; however, the proposed development in the undeveloped portions of the Project Site under Alternative 4 would be altered and reduced to avoid some of the potentially jurisdictional drainages. Alternative 4 would conserve the four highest biological value stream segments on the Project Site. As with the proposed Project, Alternative 4 would preserve Sennett Creek (Drainage A), which is a highly complex riparian, shaded riverine system. Alternative 4 would also conserve the Drainage D and Drainage F riverine complexes, which have similar vegetative structures to Sennett Creek but are more isolated from human effects and prior uses. In addition, Alternative 4 would preserve Drainage H, which is also biologically valuable due to its size and the diverse and relatively undisturbed biological resources it supports. Alternative 4 would also conserve other drainage segments, including Drainages B, F1, L6, L8, and M. In addition, portions of Drainages I, J, J1, L, L4, and L5 would also be preserved under Alternative 4. Similar to the proposed Project, Alternative 4 would include a crossing of Sennett Creek for internal roadway purposes in the southeastern portion of the Project Site.

Alternative 4 would result in approximately 103 acres of usable acreage and approximately 89 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 4 would provide approximately 4,000 fewer built spaces than the proposed Project and approximately 7,000 fewer ground spaces. Similar to the proposed Project, Alternative 4 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 4 would include approximately 1,029,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 71,000 square feet as compared to the proposed Project. Alternative 4 would result in approximately 2.5 million cubic yards of grading, or a reduction of approximately 241,000 cubic yards of grading when compared with the proposed Project. Alternative 4 would require a net export during grading of approximately 868,000 cubic yards, which is an increase of approximately 155,000 cubic yards as compared to the proposed Project. It is

estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. In addition, this Alternative would also require up to 400,000 cubic yards of soil to be exported in connection with grave preparation over this period, as with the proposed Project. As with the proposed Project, the sale of interment sites is expected to occur beyond the year 2050.

The Conceptual Site Plan illustrating conceptual development upon the completion of Alternative 4 is depicted in Figure VI-3 on page VI-42.

(1) Scale and Massing

Similar to the proposed Project, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site.

(2) Proposed Grading and Stockpiling Plan

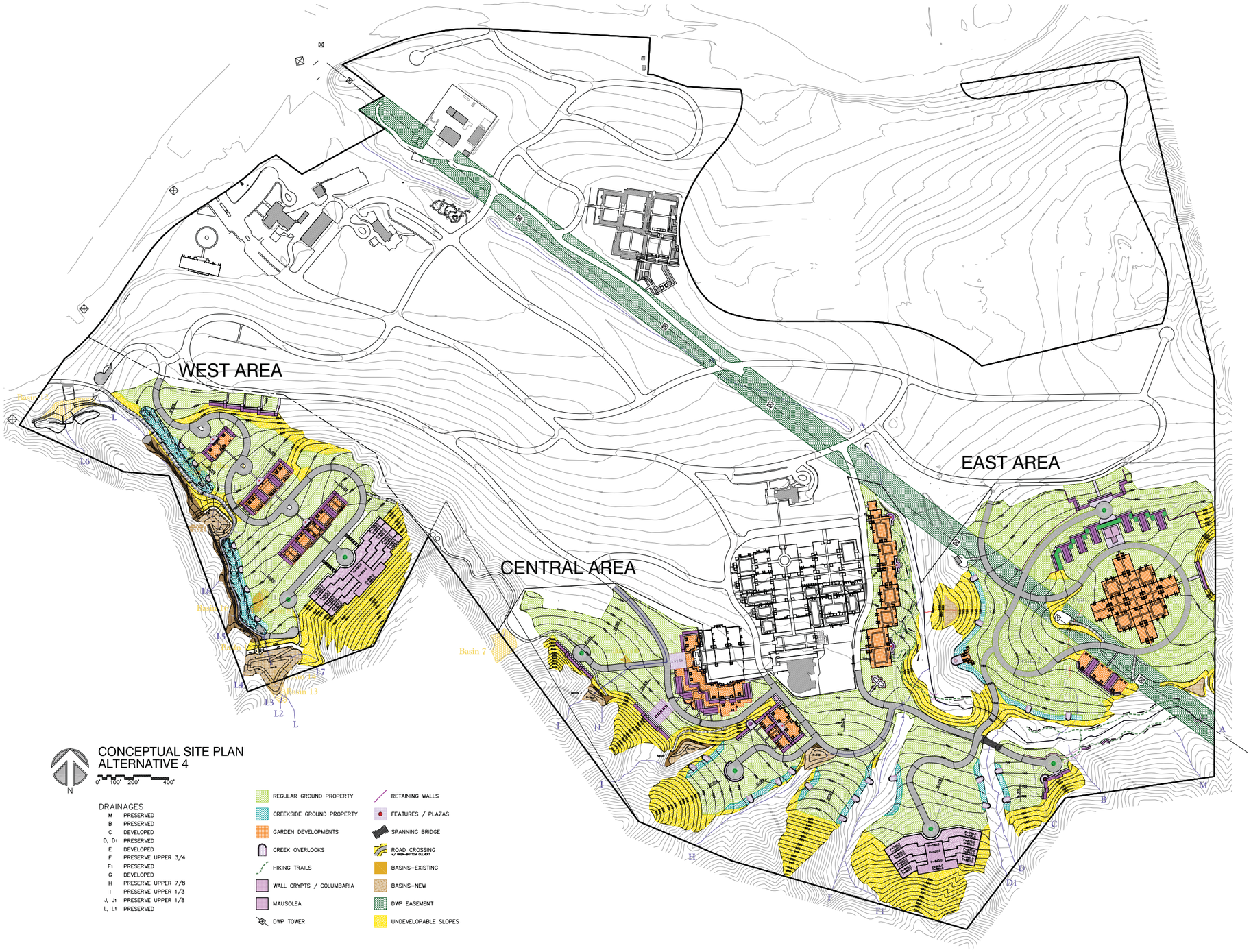
Similar to the proposed Project, the grading plan under Alternative 4 is proposed to be divided into three grading areas and three phases (i.e., Phases 1, 2 and 3). As summarized in Table VI-1 on page VI-8 the proposed improvements under Alternative 4 would affect approximately 133 acres, with approximately 103 acres of net usable area. As compared to the proposed Project, this Alternative would result in a decrease of usable and developable areas.

As with the proposed Project, the majority of the grading under Alternative 4 would occur in Phase 1 in the Central Area. As part of Phase 1, soil would be stockpiled on the West Area of the Project Site and/or transported off-site. Phase 2 would involve grading in the East Area of the Project Site with soil exported within the West Area and/or transported off-site. In addition, Phase 3 would involve grading in the West Area of the Project Site with soil stockpiled and/or transported off-site.

As with the proposed Project, soil export to off-site locations would be dependent upon market conditions and the availability of construction sites looking for suitable soil for fill material.

(3) Landscaping

The buildout of Alternative 4 would include approximately 89 acres of developable area and would include built property and ground property including lawns, ground cover,



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure VI-3
Alternative 4
Reduced Project with Preservation of Drainages D, D1, F, F1, and H

trees and garden areas. Similar to the existing landscaped areas within the developed portions of the Project Site, the landscape plan for Alternative 4 would tie into the City's water reclamation line and would use reclaimed water for irrigation.

1. Environmental Impact Analysis

a. Aesthetics

(1) Visual Character and Viewsheds

Under Alternative 4, the Project Site would be developed in a substantially similar manner as the proposed Project. However, Alternative 4 would include approximately 71,000 less square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria) as compared to the proposed Project. Similar to the proposed Project, Alternative 4 would include new construction that would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within Forest Lawn Memorial-Park—Hollywood Hills. While several of the structures could be larger in scale than existing site improvements, given the overall context of Forest Lawn Memorial-Park—Hollywood Hills, as well as the employment of the abovementioned design standards, the structures would remain visually compatible with those uses. In addition, Alternative 4 would also provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. Similar to the proposed Project, Alternative 4 would contribute to the existing visual character of Forest Lawn Memorial-Park—Hollywood Hills, adding cemetery related features, structures and site improvements consistent with the existing land use. Thus, development under this Alternative would not substantially alter, degrade, or eliminate the existing visual character of the area or obstruct valued views. Therefore, impacts under Alternative 4 to visual character and viewsheds would be less than significant and essentially equivalent to the proposed Project.

(2) Light and Glare

Alternative 4 would slightly increase light and glare compared to existing conditions; however the uses that would emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. Similar to the proposed Project, Alternative 4 would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Therefore, light and glare impacts under Alternative 4 would be less than significant and essentially equivalent to the proposed Project.

b. Air Quality

Under Alternative 4, grading activities and building construction activities would decrease in scale compared to the proposed Project since the amount of earthmoving activities and non-occupied floor area under this Alternative would decrease. However, the amount of export of soil would increase in comparison to the proposed Project. As with the proposed Project, this Alternative would generate pollutant emissions through the use of heavy-duty construction equipment and through haul truck and construction worker trips. Pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. The construction emissions generated by this Alternative would be less than those of the proposed Project over the construction period even though this Alternative results in an increase in soil export. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and like the proposed Project, would be less than significant for regional and localized construction air quality impacts.

With respect to construction air toxics, diesel particulate emissions represent the greatest potential for TAC emissions. As mentioned previously, the construction duration of this Alternative would decrease in comparison to the proposed Project resulting in a slight decrease of diesel particulate emissions. As with the proposed Project, construction-related air toxic emission impacts during construction of this Alternative would be less than significant.

Similar to the proposed Project, regional air pollutant emissions associated with Alternative 4 operations would be generated by the consumption of electricity and natural gas, and by the operation of on-road vehicles. Under Alternative 4, the proposed occupiable square footage would be the same as under the proposed Project. With this similar increase in overall occupiable square footage, area and stationary sources would generate operational pollutant emissions that would be similar to those of the proposed Project. Like the proposed Project, the total contributions to regional emissions under this Alternative would also remain less than significant for regional and localized air quality impacts.

With respect to potential air toxic impacts, this Alternative would also avoid locating air toxic emitting sources and sensitive receptors within siting distances identified by SCAQMD and ARB guidelines. Thus, similar to the proposed Project, this Alternative would result in a less than significant air quality impact related to air toxics. Such impacts would be similar to those of the proposed Project.

Greenhouse gas emissions are determined primarily by daily trips generated and energy consumption from proposed land uses. Like the Project, trip generation under the

Alternative 4 would be expected to continue to be stable through the year 2050. Due to the similar amount of occupiable structures proposed, this Alternative would generate similar energy consumption, and water usage compared to the proposed Project, which would lead to similar amounts of greenhouse gas emissions. It is assumed that similar Project Design Features promoting sustainability would be incorporated. Thus, impacts to greenhouse gas emissions under this Alternative would also be less than significant.

c. Biological Resources

With the preservation of many of the drainages on the Project Site, particularly the biologically valuable Drainages D, D1, F, F1, and H, Alternative 4 would affect fewer of the biological resources on the Project Site. Alternative 4 would impact 1.54 acres of jurisdictional "waters of the U.S.," which is less than the 2.37 acres that would be affected under the proposed Project; 4.15 acres of CDFG-designated "streambeds," which is less than the 7.94 acres that would be affected under the proposed Project; and 57.51 acres of vegetation communities, which is 12.91 acres less than the natural vegetation communities affected by the proposed Project. Alternative 4 would impact 339 protected trees, which is less than the 835 protected trees that would be impacted by the proposed Project. With implementation of the mitigation applicable to the proposed Project, impacts to biological resources under Alternative 4 would be reduced to a less than significant level, and would be reduced when compared to the proposed Project.

d. Cultural Resources

(1) Historic Resources

Since the potential historic resources on the Project Site are within the existing developed cemetery, and Alternative 4 would include the same type of development within the existing developed cemetery as the proposed Project, potential impacts with respect to historic resources under Alternative 4 would be the same as under the proposed Project (less than significant).

(2) Archaeological and Paleontological Resources

Impacts on archaeological resources under the proposed Project would be less than significant with mitigation. Under Alternative 4, the Project Site would be developed and disturbed in approximately the same manner and extent as the proposed Project. While Alternative 4 would make slight alterations to grading within drainage areas, and thus, would alter some soil export and stockpiling plans, the overall demolition, construction, grading and development of the uses for Alternative 4 would comply with all applicable laws and regulations governing the discovery of archaeological materials and human remains. However, due to the reduction of area to be graded, the potential for uncovering

of archeological and paleontological resources would be reduced when compared with the proposed Project. Thus, impacts with respect to archaeological and paleontological resources under Alternative 4 would be less than significant and less when compared to the proposed Project.

e. Geology/Soils

Under Alternative 4, the Project Site would be developed and constructed in a similar manner as the proposed Project. All structures and proposed uses under Alternative 4 would be constructed in conformance with the applicable building code design parameters. As shown in Table VI-1 on page VI-8, Alternative 4 would have approximately 13 less acres of graded area and approximately 5 less acres of developable area compared to the proposed Project. Alternative 4 would make alterations to grading within drainage areas. However, the overall amount of grading would be reduced by approximately 241,000 cubic yards when compared with the proposed Project. Thus, impacts associated with erosion and landform alteration would be less than those that would occur under the proposed Project. Like the Project, these impacts would be less than significant. As the general location of Alternative 4 be the same as that of the proposed Project, the threat of fault rupture and seismic shaking would also be the same. Thus, potential impacts relating to geologic hazards under Alternative 4 would be less than significant and similar when compared to the proposed Project.

f. Hazardous Materials/Risk of Upset

Similar to the proposed Project, all activities associated with Alternative 4 would be required to comply with applicable local, State, and federal regulations governing the routine transport, use, or disposal of potentially hazardous materials. In addition, if impacted soils or structures such as underground storage tanks are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, Alternative 4 would not have the potential to disturb or release any hazardous materials and impacts would be less than significant. This impact would be essentially equivalent to that of the proposed Project.

g. Hydrology/Water Quality

Under Alternative 4, the Project Site would be developed in a substantially similar manner as the proposed Project with alterations and improvements to drainage areas. Similar to the proposed Project, Alternative 4 would be designed and developed in a manner that ensures water quality standards are met. This includes, but is not limited to: the handling, storage and disposal of construction materials containing pollutants; the maintenance and operation of construction equipment; and earth moving activities which,

when not controlled, may generate soil erosion and transportation via storm runoff or mechanical equipment and subsurface activities which can release chemicals into groundwater. Like the proposed Project, Alternative 4 would also be required to meet water quality standards and waste discharge requirements. In addition, the amount of overall disturbance and construction related activities under Alternative 2 would be reduced when compared with the proposed Project. In addition, as described above, the development in the undeveloped portions of the Project Site under Alternative 4 would be altered to avoid some of the potentially jurisdictional drainages. Alternative 4 would also preserve the natural drainage systems in those areas. Accordingly, potential impacts associated with hydrology/water quality under Alternative 4 would be less than significant, as with the proposed Project, and reduced when compared to the proposed Project.

h. Land Use/Planning

Under Alternative 4, the Project Site would be developed with the same type of land uses and in approximately the same manner as the proposed Project. While Alternative 4 would include less cemetery development than the proposed Project, this Alternative would still include the discretionary request for a Public Benefit approval. Similar to the proposed Project, with the approval of a Public Benefit entitlement for Alternative 4, the cemetery use would be consistent with the current zoning code, which no longer requires Conditional Use Permits for cemetery use. In addition, Alternative 4 would also be consistent with the various land use policies, plans and regulations identified in Section IV.H, Land Use-Planning. Furthermore, like the proposed Project, development under Alternative 4 would be compatible with existing uses. Accordingly, land use planning impacts under Alternative 4 would be less than significant and essentially equivalent to the proposed Project.

i. Noise

Alternative 4 would result in a reduction of approximately 71,000 square feet of non-occupiable floor area when compared to the proposed Project. However, on a given day the approximate volume of construction and future operational levels under Alternative 4 would be substantially similar to the proposed Project. Similar to the proposed Project, the demolition, grading, and construction activities associated with Alternative 4 would include standard construction equipment and practices. As demonstrated in Section IV.I, Noise, the noise and vibration impacts associated with construction equipment and related activities under the more intense proposed Project scenario would be less than significant with mitigation. Accordingly, with implementation of the same mitigation measures, these impacts under Alternative 4 would also be less than significant and considered essentially equivalent to the proposed Project.

j. Traffic/Circulation and Parking

Under Alternative 4, less development would occur as compared to the proposed Project. Construction related impacts on traffic, circulation and parking would therefore be less than the proposed Project's less than significant impacts. In addition, similar to the operational analysis conducted for the proposed Project in Section IV.J, Traffic, Circulation and Parking, the trip generation under Alternative 4 is expected to continue to be stable through the year 2050. Thus, no additional growth in trip generation beyond current levels is anticipated. Accordingly, operational traffic, circulation and parking impacts under Alternative 4 would be less than significant and essentially equivalent to those that would occur under the proposed Project.

k. Public Utilities

(1) Wastewater

Under Alternative 4, the Project Site would be developed with the same amount of occupiable floor area as the proposed Project (22,500 square feet). As discussed in Section IV.K.1, Utilities, Wastewater, the proposed Project's estimated increase of approximately 4,815 gpd in wastewater flows is anticipated to be accommodated and impacts associated with wastewater capacity would be less than significant. Accordingly, Alternative 4 would also be anticipated to generate 4,815 gpd in increased wastewater flows and this amount would also be result in a less than significant impact associated with wastewater capacity. Similar to the proposed Project, should a secondary line be required at a future date, such improvements would be implemented in consultation with the Bureau of Sanitation and no significant impacts would be anticipated. Accordingly, impacts under Alternative 4 would be less than significant and essentially equivalent when compared with the proposed Project.

(2) Water

As shown in Section IV.K.2, Utilities, Water, based on the derived demand rate on the site history for domestic water usage (approximately 214 gpd per 1,000 sf), implementation of the proposed Project would result in an increased demand on water supply services of approximately 4,815 gpd. Adequate water supplies would be available to meet this demand. Accordingly, as Alternative 4 would include the same amount of occupiable floor area and a corresponding same amount of water demand as the proposed Project, water supplies would also be available to meet the demand generated by Alternative 4. In addition, as an interim project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. Furthermore, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will

improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. In summary, Alternative 4 would result in less than significant water supply impacts and these impacts would be essentially equivalent to those that would occur under the proposed Project.

(3) Electricity

As shown in Section IV.K.3, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt-hours per year and the Los Angeles Department of Water and Power would be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Accordingly, as Alternative 4 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), adequate electrical supplies would also be available to serve Alternative 4. Similar to the proposed Project, Alternative 4 would potentially be required to provide an on-site transformer station to supply both the new and existing load. In summary, Alternative 4 would result in less than significant impacts on electrical demand and such impact would be essentially equivalent to those that would occur under the proposed Project.

(4) Natural Gas

As stated in Section IV.K.3, the proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,881 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,367 cubic feet per year or 836,697 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed. Accordingly, as Alternative 4 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), it is anticipated that the demand for natural gas would also be met under Alternative 4. Potential impacts under this Alternative with respect to natural gas would thus be less than significant and essentially equivalent to those that would occur under the proposed Project.

(5) Solid Waste

As identified in Section IV.K.4, Solid Waste, over the lifetime of the proposed Project, approximately 474 additional pounds per day of solid waste would be generated by proposed Project buildings. When accounting for existing uses and interim projects, the total solid waste generation upon Project completion is estimated to be 2,727 pounds per day. Section IV.K.4 demonstrates that the increase in solid waste generation associated with the proposed Project would result in less than significant impacts on landfill capacity. Accordingly, as Alternative 4 would include the same amount of occupiable floor area as the proposed Project (22,500 square feet), it is anticipated that the total solid waste

generation under Alternative 4 would also be accommodated by existing and future landfill capacity. Therefore, impacts on solid waste under Alternative 4 would be less than significant and essentially equivalent to the proposed Project.

l. Public Services

(1) Fire Protection

Similar to the fire protection impacts discussed in Section IV.L, Public Services – Fire Protection, the activities associated with Alternative 4 would be required to comply with all applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code related to: fire flow, emergency response, wildland fire hazards, and emergency access. Accordingly, these impacts would be considered less than significant and essentially equivalent to the proposed Project.

2. Reduction of Significant Environmental Effects

a. Reduction of Significant Project Impacts

The proposed Project would not result in any significant and unavoidable impacts. Comparatively, Alternative 4 would also not result in any significant and unavoidable impacts. However, while all impact categories discussed above for Alternative 4 share the same impact statement with the proposed Project, the approximate degree of impact could be reduced when compared to the proposed Project in the following issue areas: Air Quality (Toxic Air Contaminants during Construction), Archeological and Paleontological Resources, Biological Resources, Geology and Soils (Erosion and Landform Alteration), Hydrology/Water Quality, and Traffic (Construction).

3. Assessment of Achieving the Project Objectives

Alternative 4 would provide a lesser amount of new cemetery development and approximately 11,100 fewer interment spaces (a six percent reduction in interment spaces) when compared with the Project. Thus, the Project objectives to help meet the demand for interments for the region through 2050 and beyond, to provide various types of interment spaces and mortuary facilities to meet the needs a broad array of ethnic and socio-economic groups, to provide space to accommodate multiple funeral services simultaneously, to provide sufficient ground property, and to provide areas for additional historical and inspirational works of art would be met to a lesser degree than the proposed project. Therefore, Alternative 4 would fail to match the proposed Project's ability to meet the projected future demand identified for the memorial park facilities and the regional demand for burial space.

VI. Alternatives to the Proposed Project

E. Alternative 5 – No Federal Action; Preservation of Army Corps Jurisdictional Areas

Similar to the No Project Alternative, Alternative 5 would provide additional interment sites and cemetery-related facilities within the Project Site without impact to federal jurisdictional areas. Under Alternative 5, the proposed additions within the developed portion of the Project Site would be the same as under the No Project Alternative. The proposed development in the undeveloped portions of the Project Site under Alternative 5 would be altered and reduced to avoid all of the potentially federal jurisdictional drainages. All of the stream segments on-site except Drainage G would be preserved, regardless of their biological value. Alternative 5 would require approval from the City of Los Angeles and from the California Department of Fish and Game (with respect to 0.37 acre of impact within its potential jurisdiction); however, Alternative 5 would not require permits from the Army Corps of Engineers. Alternative 5 would not include a crossing of Sennett Creek for internal roadway purposes.

Alternative 5 would result in approximately 84 acres of usable acreage and approximately 73 acres of developable acreage (as compared to approximately 110 acres of usable acreage and approximately 94 acres of developable acreage under the proposed Project). Alternative 5 would provide approximately 28,000 fewer built spaces than the proposed Project and approximately 22,000 fewer ground spaces. Alternative 5 would require approximately 1,192,000 cubic yards of cut, approximately 581,000 cubic yards of fill, and a net export amount of 611,000 cubic yards. Alternative 5 would include the construction of approximately 22,500 square feet of floor area for new structures (including such structures as a new church and reception-related uses, administrative space, and a crematory). Alternative 5 would also include approximately 768,000 square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria), which is a decrease of approximately 332,000 square feet as compared to the proposed Project. Similar to the proposed Project, it is estimated that grading would occur over a 15-year construction period. Approximately 1.77 million cubic yards of earth would be graded, which would be a reduction of approximately 970,000 cubic yards as compared to the proposed Project. Alternative 5 would require net export during grading of approximately 611,000 cubic yards, which is a decrease of approximately 102,000 cubic yards as compared to the proposed Project. As with the proposed Project, it is estimated that construction of the new structures would occur over an approximately 40-year period from 2011 to 2050. In addition, this Alternative would require up to 400,000 cubic yards of soil to

be exported in connection with grave preparation over this period, as with the proposed Project. The sale of interment sites is expected to occur beyond the year 2050.

A Conceptual Site Plan illustrating the conceptual development upon the completion of Alternative E is depicted in Figure VI-4 on page VI-53.

(1) Scale and Massing

Similar to the proposed Project, the architectural scale and massing of the proposed structures would be compatible with the existing structures and development on the Project Site.

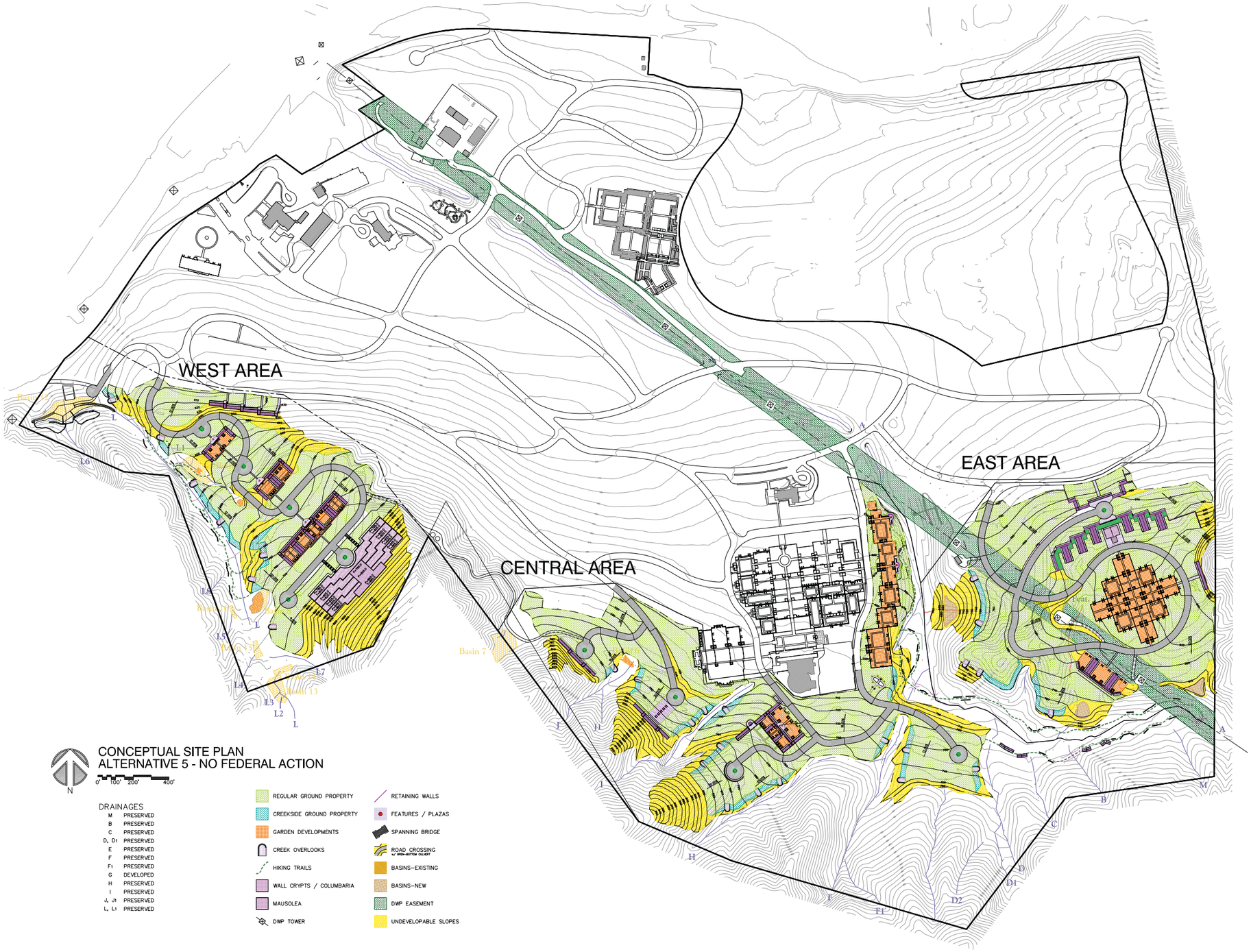
(2) Proposed Grading and Stockpiling Plan

Similar to the proposed Project, the grading plan under Alternative 5 is proposed to be divided into three grading areas and three phases (i.e., Phases 1, 2 and 3). As summarized in Table VI-1 on page VI-8, proposed improvements within Alternative 5 would affect approximately 106 acres, with approximately 84 acres of net usable area. As compared to the proposed Project, this Alternative would result in a decrease of usable and developable areas.

As with the proposed Project, the majority of the grading under Alternative 5 would occur in Phase 1located within the Central Area. As part of Phase 1, soil would be stockpiled within the West Area of the Project Site and/or transported off-site. Phase 2 would involve grading within the East Area with soil stockpiled within the West Area and/or exported off-site. In addition, Phase 3 would involve grading within the West Area with soil stockpiled and/or exported off-site. As with the proposed Project, export to off-site locations would be dependent upon market conditions and construction sites looking for suitable soil for fill material to become available.

(3) Landscaping

The buildout of Alternative 5 would include approximately 73 acres of developable area and would include built property and ground property including lawns, ground cover, trees and garden areas. Similar to the existing landscaped areas within the developed portions of the Project Site, the landscape plan for Alternative 5 would tie into the City's water reclamation line and would use reclaimed water for irrigation.



Source: Forest Lawn Memorial Park Association, 2010.

matrix environmental

Figure VI-4

Alternative 5

No Federal Action – Reduced Project with Preservation of all Army Corps Jurisdictional Areas

1. Environmental Impact Analysis

a. Aesthetics

(1) Visual Character and Viewsheds

Under Alternative 5, the Project Site would be developed in a substantially reduced manner as compared to the proposed Project. Alternative 5 would include approximately 332,000 less square feet of non-occupied floor area (for such uses as burial garden structures, wall crypts and columbaria) as compared to the proposed Project. Similar to the proposed Project, Alternative 5 would include new construction that would incorporate the use of design standards consistent with the existing form, color and materials which typify existing site improvements within Forest Lawn Memorial-Park—Hollywood Hills. While several of the structures could be larger in scale than existing site improvements, given the overall context of Forest Lawn Memorial-Park—Hollywood Hills, as well as the employment of the abovementioned design standards, the structures would remain visually compatible with those uses. In addition, Alternative 5 would also provide lawn and garden area landscaping consistent with the existing site development within the developable areas of the Project Site, and groundcover within the undevelopable slope and drainage areas. Similar to the proposed Project, Alternative 5 would contribute to the existing visual character of Forest Lawn Memorial-Park—Hollywood Hills, adding cemetery related features, structures and site improvements consistent with the existing land use. Thus, development under this Alternative would not substantially alter, degrade, or eliminate the existing visual character of the area or obstruct valued views. Therefore, impacts under Alternative 5 to visual character and viewsheds would be less than significant and essentially equivalent to the proposed Project.

(2) Light and Glare

Alternative 5 would slightly increase light and glare compared to existing conditions; however the uses that would emanate light and/or glare would be substantially consistent with the existing light sources within the Project Site. Similar to the proposed Project, Alternative 5 would incorporate a lighting plan that would include design guidelines for directional lighting fixtures to be used to highlight architectural features and for pedestrian safety and security purposes. Light trespass is not anticipated to travel beyond the Project Site. Therefore, light and glare impacts under Alternative 5 would be less than significant and essentially equivalent to the proposed Project.

b. Air Quality

Under Alternative 5, grading activities and building construction activities would decrease in scale compared to the proposed Project since the amount of earthmoving

activities, export of soil, and non-occupied floor area under this Alternative would decrease. As with the proposed Project, this Alternative would generate pollutant emissions through the use of heavy-duty construction equipment and through haul truck and construction worker trips. Pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. The construction emissions generated by this Alternative would be less than those of the proposed Project over the construction period. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and like the proposed Project, would be less than significant for regional and localized construction air quality impacts.

With respect to construction air toxics, diesel particulate emissions represent the greatest potential for TAC emissions. Due to the reduction in grading activities, the construction duration of this Alternative would decrease in comparison to the proposed Project resulting in a slight of diesel particulate emissions. As with the proposed Project, construction-related air toxic emission impacts during construction of this Alternative would be less than significant.

Similar to the proposed Project, regional air pollutant emissions associated with Alternative 5 operations would be generated by the consumption of electricity and natural gas. Under Alternative 5, the proposed occupiable square footage would be the same as under the proposed Project. With this similar increase in overall occupiable square footage, area and stationary sources would generate operational pollutant emissions that would be similar to those of the proposed Project. Like the proposed Project, the total contributions to regional emissions under this Alternative would also remain less than significant for regional and localized air quality impacts.

With respect to potential air toxic impacts, this Alternative would also avoid locating air toxic emitting sources and sensitive receptors within siting distances identified by SCAQMD and ARB guidelines. Thus, similar to the proposed Project, this Alternative would result in a less than significant air quality impact related to air toxics. Such impacts would be similar to those of the proposed Project.

Greenhouse gas emissions are determined primarily by daily trips generated and energy consumption from proposed land uses. Like the Project, trip generation under the Alternative 5 would be expected to continue to be stable through the year 2050. Due to the similar amount of occupiable structures proposed, this Alternative would generate similar energy consumption, and water usage compared to the proposed Project, which would lead to similar amounts of greenhouse gas emissions. It is assumed that similar Project Design Features promoting sustainability would be incorporated. Thus, impacts to greenhouse gas emissions under this Alternative would also be less than significant.

c. Biological Resources

With the preservation of nearly all of the drainages on the Project Site, particularly the biologically valuable Drainages D, D1, F, F1, and H, Alternative 5 would affect fewer of the biological resources on the Project Site. Alternative 5 would not impact any jurisdictional "waters of the U.S.," thus avoiding the 2.37 acres that would be affected under the proposed Project. In addition; Alternative 5 would impact 0.37 acres of CDFG-designated "streambeds," which is less than the 7.94 acres that would be affected under the proposed Project; and 36.75 acres of vegetation communities, which is 33.67 acres less than the natural vegetation communities affected by the proposed Project. Alternative 5 would impact 77 protected trees, which is less than the 835 protected trees that would be impacted by the proposed Project. With implementation of the mitigation measures that are applicable to the proposed Project, impacts to biological resources under Alternative 5 would be reduced to a less than significant level. Such impacts would be reduced when compared to the proposed Project.

d. Cultural Resources

(1) Historic Resources

Since the potential historic resources on the Project Site are within the existing developed cemetery, and Alternative 5 would include the same type of development within the existing developed cemetery as the proposed Project, potential impacts with respect to historic resources under Alternative 5 would be the same as under the proposed Project (less than significant).

(2) Archaeological and Paleontological Resources

Under Alternative 5, the Project Site would be developed in approximately the same manner as the proposed Project, however Alternative 5 would provide reduced grading and soil disturbance. While Alternative 5 would include major alterations to grading plans within all drainage preservations areas, the overall demolition, construction, grading and development of the uses for Alternative 5 would be required to comply with all applicable laws and regulations governing the discovery of archaeological materials and human remains. However, due to the reduction of area to be graded, the potential for uncovering of archeological and paleontological resources would be reduced when compared with the proposed Project. Thus, impacts with respect to archaeological and paleontological resources under Alternative 5 would be less than significant and less when compared to the proposed Project.

e. Geology/Soils

Under Alternative 5, the Project Site would be developed in approximately the same manner as the proposed Project, however Alternative 5 would provide reduced grading and soil disturbance. Nevertheless, all structures and proposed uses under Alternative 5 would be constructed in conformance with the applicable building code design parameters. As shown in Table VI-1 on page VI-8, Alternative 5 would have 41 less acres of graded area and 21 less acres of developable area when compared to the proposed Project. As Alternative 5 would include major alterations to grading plans within all drainage preservations areas and reduced overall square footage, the type of impacts related to erosion and landform alteration would be less than the proposed Project. Like the Project, these impacts would be less than significant. As the general location of Alternative 5 would be the same as that of the proposed Project, the threat of fault rupture and seismic shaking would also be the same. Thus, potential impacts relating to geologic hazards under Alternative 5 would be less than significant and similar when compared to the proposed Project.

f. Hazardous Materials/Risk of Upset

Similar to the proposed Project, all activities associated with Alternative 5 would be required to comply with applicable local, State, and federal regulations governing the routine transport, use, or disposal of potentially hazardous materials. In addition, if impacted soils or structures such as underground storage tanks are encountered, compliance with existing regulations would prevent exposure of people to substantial risk resulting from the release of hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, Alternative 5 would not have the potential to disturb or release any hazardous materials and impacts would be less than significant. This impact would be essentially equivalent to that of the proposed Project.

g. Hydrology/Water Quality

Under Alternative 5, the Project Site would be developed in approximately the same manner as the proposed Project. However, Alternative 5 would provide reduced grading and soil disturbance. Similar to the proposed Project, Alternative 5 would be designed and developed in a manner that ensures water quality standards are met. This includes, but is not limited to: the handling, storage and disposal of construction materials containing pollutants; the maintenance and operation of construction equipment; and earth moving activities which, when not controlled, may generate soil erosion and transportation via storm runoff or mechanical equipment and subsurface activities which can release chemicals into groundwater. Like the proposed Project, Alternative 5 would be required to meet water quality standards and waste discharge requirements. In addition, the amount of overall disturbance and construction related activities under Alternative 5 would be

reduced when compared with the proposed Project. In addition, as described above, development in the undeveloped portions of the Project Site under Alternative 5 would be altered to avoid nearly all of the potentially jurisdictional drainages. Thus, Alternative 5 would also preserve the natural drainage systems in those areas. Accordingly, impacts associated with hydrology/water quality under Alternative 5 would be less than significant, as with the proposed Project, and reduced when compared to the proposed Project.

h. Land Use/Planning

Under Alternative 5, the Project Site would be developed with the same type of land uses and in approximately the same manner as the proposed Project. While Alternative 5 would include a reduction of approximately 332,000 in non-occupied square footage, this Alternative would still include the discretionary request for the Public Benefit approval. Similar to the proposed Project, with the approval of a Public Benefit entitlement for Alternative 5, the cemetery use would be consistent with the current zoning code, which no longer requires Conditional Use Permits for cemetery use. In addition, Alternative 5 would also be consistent with the various land use policies, plans and regulations identified in Section IV.H, Land Use-Planning. Furthermore, like the proposed Project, development under Alternative 5 would be compatible with existing uses. Accordingly, land use planning impacts under Alternative 5 would be less than significant and essentially equivalent to the proposed Project.

i. Noise

Alternative 5 would result in a reduction of approximately 332,000 square feet of non-occupied area as compared to the proposed Project. Thus, the approximate volume of construction and future operational levels would be reduced compared to the proposed Project. However, similar to the proposed Project, the demolition, grading, and construction activities associated with Alternative 5 would include standard construction equipment and practices. In addition, as demonstrated in Section IV.I, Noise, the noise and vibration impacts associated with construction equipment and related activities under the more intense proposed Project scenario would be less than significant with mitigation. Accordingly, as the same mitigation measures would be applicable, these impacts under Alternative 5 would also be less than significant and considered essentially equivalent to the proposed Project.

j. Traffic/Circulation and Parking

Under Alternative 5, less development would occur as compared to the proposed Project. Construction related impacts on traffic, circulation and parking would therefore be less than significant under this Alternative and reduced when compared with the proposed Project. In addition, similar to operational impacts demonstrated for the proposed Project

in Section IV.J, Traffic, Circulation and Parking, the trip generation under Alternative 5 is expected to continue to be stable through the year 2050. Thus, no additional growth in trip generation beyond current levels is anticipated. Accordingly, operational traffic, circulation and parking impacts under Alternative 5 would be less than significant and essentially equivalent to those that would occur under the proposed Project.

k. Public Utilities

(1) Wastewater

Under Alternative 5, the Project Site would be developed with the same amount of occupiable floor area as the proposed Project. As discussed in Section IV.K.1, Utilities, Wastewater, the proposed Project's estimated increase of approximately 4,815 gpd in wastewater flows is anticipated to be accommodated and impacts associated with wastewater capacity would be less than significant. Accordingly, Alternative 5 would also be anticipated to generate 4,815 gpd in increased wastewater flows and this amount would also result in a less than significant impact associated with wastewater capacity. Similar to the proposed Project, should a secondary line be required at a future date, such improvements would be implemented in consultation with the Bureau of Sanitation and no significant impacts would be anticipated. Accordingly, impacts under Alternative 5 would be less than significant and essentially equivalent when compared with the proposed Project.

(2) Water

As shown in Section IV.K.2, Utilities, Water, based on the derived demand rate on the site history for domestic water usage (approximately 214 gpd per 1,000 sf), implementation of the proposed Project would result in an increased demand on water supply services of approximately 4,815 gpd. Adequate water supplies would be available to meet this demand. Accordingly, as Alternative 5 would include the same amount of occupiable floor area and a corresponding same amount of water demand as the proposed Project, water supplies would also be available to meet the demand generated by Alternative 5. In addition, as an interim project, the Applicant will be installing a new high-pressure water service line with approximately 1,130 lineal feet of pipe. Furthermore, LADWP is currently in the process of upgrading the potable water trunk line beneath Forest Lawn Drive. This replacement is scheduled to be built and operational in late 2013 and will improve the domestic water flow and pressure. Together, these projects are anticipated to improve water pressure on the Project Site. In summary, Alternative 5 would result in less than significant water supply impacts and these impacts would be essentially equivalent to those that would occur under the proposed Project.

(3) Electricity

As shown in Section IV.K.3, the estimated net increase in electricity consumption by the proposed Project is approximately 507,127 kilowatt-hours per year and the Los Angeles Department of Water and Power would be able to accommodate the proposed Project's demand for electricity with existing electricity supplies. Accordingly, as Alternative 5 would include the same amount of occupiable floor area as the proposed Project, adequate electrical supplies would also be available to serve Alternative 5. Similar to the proposed Project, Alternative 5 would potentially be required to provide an on-site transformer station to supply both the new and existing load. In summary, Alternative 5 would result in less than significant impacts on electrical demand and such impacts would be essentially equivalent to those that would occur under the proposed Project.

(4) Natural Gas

As stated in Section IV.K.3, the proposed Project's net increase in demand for natural gas is estimated to be approximately 4,243,881 cubic feet per year. The total natural gas usage on the Project Site would increase to approximately 10,040,367 cubic feet per year or 836,697 cubic feet per month. The Southern California Gas Company has indicated that the Project's demand for natural gas could be served via current supply capacities, and no improvements or additions to Southern California Gas Company's off-site distribution system would be needed. Accordingly, as Alternative 5 would include the same amount of occupiable floor area as the proposed Project, it is estimated the demand on natural gas services would also be met under Alternative 5. Potential impacts under this Alternative with respect to natural gas would thus be less than significant and essentially equivalent to those that would occur under the proposed Project.

(5) Solid Waste

As identified in Section IV.K.4, Solid Waste, over the lifetime of the proposed Project, approximately 474 additional pounds per day of solid waste would be generated by proposed Project buildings. When accounting for existing uses and interim projects, the total solid waste generation upon Project completion is estimated to be 2,727 pounds per day. Section IV.K.4 demonstrates that the increase in solid waste generation associated with the proposed Project would result in less than significant impacts. Accordingly, as Alternative 5 would include the same amount of occupiable floor area as the proposed Project, it is estimated the total solid waste generation under Alternative 5 would also be accommodated by existing and future landfill capacity. Therefore, impacts on solid waste under Alternative 5 would be less than significant and essentially equivalent to the proposed Project.

l. Public Services

(1) Fire Protection

Similar to the fire protection impacts discussed in Section IV.L, Public Services – Fire Protection, the activities associated with Alternative 5 would be required to comply with all applicable Los Angeles Fire Code, California Fire Code, and City of Los Angeles Building Code related to: fire flow, emergency response, wildland fire hazards, and emergency access. Accordingly, these impacts would be considered less than significant and essentially equivalent to the proposed Project.

2. Reduction of Significant Environmental Effects

a. Reduction of Significant Project Impacts

The proposed Project would not result in any significant and unavoidable impacts. Comparatively, Alternative 5 would also not result in any significant and unavoidable impacts. However, while all impact categories discussed above for Alternative 5 share the same impact statement with the proposed Project, the approximate volume of impact could be reduced when compared to the proposed Project in the following issue areas: Air Quality (Toxic Air Contaminants during Construction) Archaeological and Paleontological Resources, Biological Resources, Geology/Soils (Sedimentation and Erosion and Landform Alteration), Hydrology/Water Quality, and Traffic (Construction).

3. Assessment of Achieving the Project Objectives

Alternative 5 would provide a reduction in cemetery development and approximately 50,000 fewer interment spaces (an approximately 25 percent reduction in interment spaces) as compared with the proposed Project. Thus, the Project objectives to help meet the demand for interments for the region through 2050 and beyond, to provide various types of interment spaces and mortuary facilities to meet the needs a broad array of ethnic and socio-economic groups, to provide space to accommodate multiple funeral services simultaneously, to provide sufficient ground property, and to provide areas for additional historical and inspirational works of art would only be partially met. Therefore, Alternative 5 would fail to match the proposed Project's ability to meet the projected future demand identified for the memorial park facilities and the regional demand for burial space.

VI. Alternatives

F. Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should it be determined that the No Project Alternative is the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives. With respect to identifying an Environmentally Superior Alternative among those analyzed in this EIR, the range of feasible alternatives includes the No Project Alternative; the Reduced Project Alternative with Preservation of Drainages D and D1; the Reduced Project Alternative with Preservation of Drainages D, D1, F, and F1; the Reduced Project Alternative with Preservation of Drainages D, D1, F, F1, and H; and No Federal Action – Reduced Project with Preservation of all Drainages.

A comparative summary of the environmental impacts anticipated under each alternative with the environmental impacts associated with the proposed Project is provided above and summarized in Table VI-2 on page VI-63. Pursuant to Section 15126.6(c) of the CEQA Guidelines, the analysis below addresses the ability of the alternatives to "avoid or substantially lessen one or more of the significant effects" of the proposed Project.

Of the alternatives analyzed in the EIR, the No Project Alternative is considered the Environmentally Superior Alternative as it would reduce the majority of the less than significant impacts occurring under the proposed Project. However, as indicated above, this Alternative would not meet most of the Project objectives established for the proposed Project.

In accordance with the CEQA Guidelines requirement to identify an Environmentally Superior Alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that Alternative 4: Reduced Project with Preservation of Drainages D, D1, F, F1, and H would be the Environmentally Superior Alternative. This Alternative would reduce more of the Project impacts than any of the other remaining alternatives. However, as discussed above, this Alternative would meet several of the project objectives to a lesser degree than the proposed Project.

Table VI-2
Comparison of Impacts Associated with the Proposed Project and Impacts of the Alternatives

Environmental Issue	Project Impact	Alternative 1 No Project	Alternative 2 Reduced Project with Preservation of Drainages D and D1	Alternative 3 Reduced Project with Preservation of Drainages D, D1, F, and F1	Alternative 4 Reduced Project with Preservation of Drainages D, D1, F, F1, and H	Alternative 5 No Federal Action – Reduced Project with Preservation of all Army Corps Jurisdictional Areas
A. AESTHETICS						
Visual Character and Viewsheds	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Light and Glare	Less Than Significant	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
B. AIR QUALITY						
Construction - Regional Emissions	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Construction - Local Emissions	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Construction - Toxic Air Contaminants	Less than Significant	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
Operational - Regional Emissions	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Operational - Local Emissions	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Operational -Toxic Air Contaminants	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Greenhouse Gases	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Odors	Less than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
C. BIOLOGICAL RESOURCES						
Biological Resources	Less than Significant w/Mitigation	Less (Less Than Significant)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Resource Agency Jurisdictional Impacts	Less Than Significant w/ Mitigation	Less (No Impact)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
D. CULTURAL RESOURCES						
Historic Resources	Less Than Significant	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Archaeological Resources	Less Than Significant w/ Mitigation	Less (Less Than Significant)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/ Mitigation)
Paleontological Resources	Less Than Significant w/ Mitigation	Less (Less Than Significant)	Less (Less Than Significant w/ Mitigation)	Less (Less Than Significant w/	Less (Less Than Significant w/	Less (Less Than Significant w/

Table VI-2 (Continued)
Comparison of Impacts Associated with the Proposed Project and Impacts of the Alternatives

Environmental Issue	Project Impact	Alternative 1 No Project	Alternative 2 Reduced Project with Preservation of Drainages D and D1	Alternative 3 Reduced Project with Preservation of Drainages D, D1, F, and F1	Alternative 4 Reduced Project with Preservation of Drainages D, D1, F, F1, and H	Alternative 5 No Federal Action – Reduced Project with Preservation of all Army Corps Jurisdictional Areas
				Mitigation)	Mitigation)	Mitigation)
E. GEOLOGY AND SOILS						
Geologic Hazards	Less Than Significant w/ Mitigation	Less (Less Than Significant	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)
Sedimentation and Erosion	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
Landform Alteration	Less Than Significant	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
F. HAZARDS AND HAZARDOUS MATERIALS						
Hazards and Hazardous Materials	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant	Similar (Less Than Significant)
G. HYDROLOGY AND WATER QUALITY						
Hydrology	Less Than Significant	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
Water Quality	Less Than Significant	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
H. LAND USE						
Consistency with Land Use Policies and Regulations	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Land Use Compatibility	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
I. NOISE						
Construction						
Noise	Less Than Significant w/ Mitigation	Less (Less Than Significant)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)	Similar (Less Than Significant w/ Mitigation)
Vibration	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Operation						
Noise	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)

Table VI-2 (Continued)
Comparison of Impacts Associated with the Proposed Project and Impacts of the Alternatives

Environmental Issue	Project Impact	Alternative 1 No Project	Alternative 2 Reduced Project with Preservation of Drainages D and D1	Alternative 3 Reduced Project with Preservation of Drainages D, D1, F, and F1	Alternative 4 Reduced Project with Preservation of Drainages D, D1, F, F1, and H	Alternative 5 No Federal Action – Reduced Project with Preservation of all Army Corps Jurisdictional Areas
Vibration	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
J. TRAFFIC, CIRCULATION, AND PARKING						
Construction						
Traffic	Less Than Significant	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
Operation						
Intersection Capacity, Street Segment Capacity, Freeway Capacity, and Neighborhood Intrusion Impacts	Less Than Significant	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
K. UTILITIES AND SERVICE SYSTEMS						
Wastewater	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Water	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Energy	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Solid Waste	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
L. Public Services – Fire Protection						
Facilities and Equipment	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Fire Flows	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Emergency Response	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Wildland Fire Hazards	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)

Source: Matrix Environmental, 2010.

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F. List of Acronyms

µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ACM	asbestos containing material
ADT	average daily traffic
AF	acre-feet
AFY	acre-feet per year
ANFO	ammonium nitrate and fuel oil
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
bgs	below ground surface
BMP	best-management practices
C&D	construction and demolition
CA WDS	California Waste Discharge System
CalEPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association

CARB	California Air Resources Board
CAT	California Climate Action Team
CBC	California Building Code
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cf	cubic feet
cfs	cubic feet per second
CGS	California Geological Survey
CiSWMPP	City of Los Angeles Solid Waste Management Policy Plan
City	City of Los Angeles
CIWMB	California Integrated Waste Management Board
CLA	City of Los Angeles CEQA Thresholds Guide Local List
CMP	Congestion Management Plan
CMP	corrugated metal pipes
CNDDB	California Natural Diversity Database

CNEL	community noise equivalency level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_{2e}	carbon dioxide equivalent
ColWMP	Los Angeles County Integrated Waste Management Plan
Corps	United States Army Corps of Engineers
County	Los Angeles County
CRAM	California Rapid Assessment Method
CSDLAC	County Sanitation Districts of Los Angeles County
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
CWA	Clean Water Act
cy	cubic yard(s)
D/C	demand to capacity
d/D	current flow level (ratio of depth [d] of flow to sewer pipe diameter [D])
dB	decibel
dBA	A-weighted decibels
DBH	diameter-at-breast height
DOI	United States Department of the Interior

DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMS	emergency medical services
EOO	City of Los Angeles Emergency Operations Organization
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FTA	Federal Transit Administration
g/s	gram(s)/second
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
HABS	Historic American Building Survey
HMMP	Habitat Mitigation and Monitoring Program
HRA	health risk assessment
HSA	Hyperion Service Area
HTP	Hyperion Treatment Plant
I	Interstate

IGR	intergovernmental review
IID	Imperial Irrigation District
in	inch(es)
IRP	Integrated Resources Plan
ISC	industrial source classification
ITE	Institute of Transportation Engineers
kV	kilovolt
kWh	kilo-watt hours
LAA	Los Angeles Aqueduct
LADBS	City of Los Angeles Department of Building and Safety
LADOT	City of Los Angeles Department of Transportation
LADPW	City of Los Angeles Department of Public Works
LADWP	City of Los Angeles Department of Water and Power
LAFD	City of Los Angeles Fire Department
LAGWRP	Los Angeles-Glendale Water Reclamation Plant
LAMC	City of Los Angeles Municipal Code
LARWQCB	Los Angeles Regional Water Quality Control Board
LBP	lead-based paint
lbs	pound(s)
L_{dn}	day-night average level

LEA	local enforcement agency
LEED	Leadership in Energy and Environmental Design
L_{eq}	equivalent energy noise level
LST	Localized Significant Threshold
$MMTCO_{2e}$	million metric tons carbon dioxide equivalent
MRZ-2	Mineral Resource Zone 2 Area
MS4	municipal separate storm sewer system
MSCP	Multi-Species Conservation Program
MSDS	material safety data sheet
MSL	mean sea level
$MTCO_{2e}$	metric tons carbon dioxide equivalent
MW/hr	megawatt-hour
MWD	Metropolitan Water District
N/A	not applicable
NAHC	California Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO	nitric oxide
NO_2	nitrogen dioxide

NOI	Notice of Intent
NOP	Notice of Preparation
NOS	North Outfall Sewer
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
OPR	Governor's Office of Planning and Research
OSHA	Federal Occupational Safety and Health Administration
OSM	Office of Surface Mining Reclamation and Enforcement
PCB	polychlorinated biphenyls
PCE	tetrachloroethylene
PDFs	Project Design Features
PDWF	peak dry weather flow
PM_{10}	respirable particulate matter 10 microns in diameter or smaller
$PM_{2.5}$	fine particulate matter 2.5 microns in diameter or smaller
ppd	pounds per day
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRD	Permit Registration Document
PRG	Preliminary Remediation Goals

psi	pounds per square inch
PVID	Palo Verde Irrigation District
PWWF	peak weather wet flow
QSA	Quantification Settlement Agreements
RCP	Southern California Association of Governments' Regional Comprehensive Plan
RCP	reinforced concrete pipe
RCPG	Southern California Association of Governments' Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RCRA-SQG	Resource Conservation and Recovery Act Small Quantity Generator
RGA	Rules of General Application
RIO	River Improvement Overlay
rms	root mean square
RPS	California Renewables Portfolio Standard
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Permit
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District

SCAR	Sewer Capacity Availability Review
SCCIC	South Central Coastal Information Center
SDCWA	San Diego County Water Authority
SEA	Significant Ecological Area
sf	square feet
SFP	State Fully Protected
SO_2	sulfur dioxide
SOPA	Society of Professional Archaeologist
SP	Special Publications
S-Permit	sewer permit
SQMP	Stormwater Quality Management Program
SR	State Route
SRA	source receptor area
SSC	Species of Special Concern
SUSMP	Standard Urban Stormwater Management Plan
SWIRP	City of Los Angeles Solid Waste Integrated Resources Plan
SWIS	Solid Waste Information System
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TAC	toxic air contaminant
T-BACT	Toxic Best Available Control Technology
TCE	trichloroethylene
TCSA	Toxic Substances Control Act
TISA	Terminal Island Service Area
TMDL	Total Maximum Daily Load
tpd	tons per day
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
TWRP	Donald C. Tillman Water Reclamation Plant
UCLA	University of California – Los Angeles
ULARA	Upper Los Angeles River Area
US	United States Route
USBM	United States Bureau of Mines
USC	University of Southern California
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity

VdB	vibration decibels
VOC	volatile organic compound
Waters	Waters of the United States
WECC	Western Electricity Coordinating Council
WIP	Well Investigation Program
WSAP	Water Supply Allocation Plan
WSD	Water Surplus and Drought Management Plan
χ/Q	chi over Q