BOARD REPORT	NO	16-206
DATE September 21, 2016	C.D	10

SUBJECT: RANCHO CIENEGA SPORTS COMPLEX (PHASE 1 – PRJ20308) (PHASE 2 – PRJ21049) (W.O. #E1907694) – ADOPT THE INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

AP Diaz Fiel * R. Barajas H. Fujita	ĊSD	V, Israel K, Regan N, Williams		(Dai)
Approved			Disapproved _	Withdrawn

RECOMMENDATIONS

- Review, consider and adopt the Initial Study (IS) and Mitigated Negative Declaration (MND), herein included as Attachment 1, for the Rancho Cienega Sports Complex (Phase 1 PRJ20308) (Phase 2 PRJ21049) (W.O. #E1907694) project (Project), finding that on the basis of the whole record of proceedings of the Project, including the IS/MND and any public and/or agency comments received therefrom, that there is no substantial evidence that the Project will have a significant effect on the environment, and that all potentially significant environmental effects of the Project have been properly disclosed, evaluated, and mitigated in the IS/MND in compliance with the California Environmental Quality Act (CEQA) and the State and City CEQA Guidelines, and that the IS/MND reflects the Board's independent judgment and analysis;
 - Adopt the Mitigation Monitoring and Reporting Plan (MMRP), published under separate cover, herein included as Attachment 3, that specifies the mitigation measures to be implemented in accordance with CEQA Guidelines (Section 15074(d));
 - Approve the Rancho Cienega Sports Complex (Phase 1 PRJ20308)(Phase 2 PRJ21049) (W.O. #E1907694) Project, as described herein;
 - Direct Staff to file a Notice of Determination (NOD) for the adopted IS/MND with the Los Angeles City Clerk and the Los Angeles County Registrar/Recorder within five days of the Board's approval; and,
- Authorize the Department of Recreation and Parks' (RAP) Chief Accounting Employee to prepare a check to the Los Angeles County Clerk in the amount of Seventy-Five Dollars (\$75.00) for the purpose of filing the NOD.

PG.2 NO. 16-206

SUMMARY

The Rancho Cienega Sports Complex (Phase 1 – PRJ20308) (Phase 2 – PRJ21049) (W.O. #E1907694) Project is located at 5001 Rodeo Road in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles, in Council District 10.

The proposed Project will be implemented in two phases. The components proposed to be implemented in each phase are described below. The proposed Project would be designed and constructed to meet LEED Silver designation. The construction of the proposed Project is anticipated to begin in December 2016 and would occur for approximately twenty-seven (27) months, ending in March 2019. Phase 1 activities would last approximately seventeen (17) months, and Phase 2 activities would last approximately ten (10) months.

Phase 1

Phase 1 will include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the Project site and include the following elements:

Indoor Gymnasium

The existing gymnasium would be demolished and a new approximately 24,000-square-foot gymnasium would be built east of the Jackie Robinson Stadium and north of the primary parking lot. The proposed new gymnasium would include office space, a running path, and a lookout deck on the second floor, and a second floor walkway that would connect the proposed indoor gymnasium to the proposed indoor pool.

Indoor Pool and Multi-use Building

The scope includes demolition of the existing restroom facilities and construction of a new, approximately 25,000-square-foot indoor pool and bathhouse facility in the central portion of the property adjacent to the existing childcare center and north of the proposed primary parking area. The new indoor pool facility would include a bathhouse, restrooms, lockers, and changing rooms on the ground floor, and a community room, fitness annex, and kitchen on the mezzanine level.

Tennis Shop/Overlook

The existing tennis shop will receive interior and infrastructure upgrades, as well as the installation of two Americans with Disabilities Act (ADA) accessible restrooms. A new bleacher structure would be constructed adjacent to the existing tennis courts, and east of the existing childcare center, to provide a shaded viewing area of the tennis courts.

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Stadium Overlook/Concession Stand

A new stadium overlook and concession stand would be constructed east of and adjacent to the existing stadium. The facility will include a include a concession stand, restrooms, and a ticket office on the ground level, and a stadium overlook on the mezzanine level, totaling approximately 4,000 square feet.

Playground

The existing playground located between the existing childcare center and tennis courts would be demolished, in order to accommodate the new tennis shop and restroom facility. A new playground would be constructed directly west of the proposed tennis shop.

Primary Parking Lot

The existing parking lot along Rodeo Road will be re-graded, rearranged, and repaved to meet the current parking standards.

Phase 2

Phase 2 includes demolition of the concrete surrounding the existing RAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscape and hardscape. The majority of the Phase 2 activities would occur in the western and northwestern portion of the Project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the Project site. The Phase 2 components include the following: grading and repaving of the parking lot located on the North side of the site, development of a new parking lot that infiltrates 100% of the storm-water, and installation of landscape and hardscape.

RAP Maintenance Yard and Refuse Collection Center

The scope includes rehabilitation of the existing RAP maintenance building and relocation of the RAP maintenance yard adjacent to the northwest corner of the Jackie Robinson Stadium. A new maintenance yard and refuse collection center would be constructed adjacent to the rehabilitated RAP maintenance building.

Northwestern Driveway

The scope includes construction of a new driveway at the northwestern boundary of the project site. The driveway would extend towards Exposition Boulevard that currently ends at the parking lot on the northwestern part of the property.

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Controlled Driveway

The construction of a new controlled driveway at the southwest corner of the Project site near the Jackie Robinson Stadium has been included to alleviate parking and access limitations. The driveway would allow only right-in/right-out access from Rodeo Road when additional parking is required for special events or community programs. Bollards would be located at the driveways to prohibit access during normal operations.

Off-street Parking

The scope includes installation of off-street parking along the western boundary of the Project site, adjacent to the Jackie Robinson Stadium. Additional off-street parking would be installed along the northwestern boundary of the Project site, adjacent to the new driveway and Metro Expo Rail Line. With installation of off-street parking, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements.

Overflow Parking

Alteration of the existing parking lot in the northwestern portion of the Project site controlled overflow parking area. Based on scheduling, the overflow parking area can also be used for events, or passive park activities. When used for parking, an additional eighty-eight (88) spaces would be available to park patrons, for a total of 499 parking spaces in the overall park. Bollards would be located at the driveways to prohibit access during normal operations.

The proposed Project is being designed and constructed to meet the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Silver designation, and to achieve the Living Building Challenge Net Zero Energy Certification.

The proposed Project would be constructed using a combination of Federal and local funds. Funding may include U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG), Proposition K (the L.A. for Kids Program), Capital Improvement Expenditure Program (CIEP), Municipal Improvement Corporation of Los Angeles (MICLA), and Quimby Funds. The City Engineer's Estimate for the construction costs for the first phase of this Project is Twenty-Five Million Dollars (\$25,000,000.00). Bid alternates will be placed in the Bid documents to account for the funding gap. RAP and Council District 10 are also searching for additional funding sources. The second phase will be funded as needed in the following fiscal years. Funds are currently available from the following funding sources:

FUNDING SOURCE	FUND/DEPT/ACCT NO	AMOUNT
Community Development Block Grant (CDBG), United States Department of Housing and Urban Development (HUD)	424/43/43L505	\$3,640,432

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FUNDING SOURCE	FUND/DEPT/ACCT NO	AMOUNT
Proposition K (Sports Complex/ Fitness Annex)		
Proposition K K-17 (S93 - PY 17; FY 2013-14)	43K/10/10K213	\$100,000
Proposition K K-18 (S93 - PY 18; FY 2014-15)	43K/10/10L213	\$300,000
Proposition K K-18 (S94 - PY 18; FY 2014-15) inflation	43K/10/10LK04	\$125,509
Proposition K K-19 (FY 17-18) (S93 - PY 19; FY 2015-16)	TBD	\$750,000
Proposition K K-20 (FY 18-19) (S93 - PY 20; FY 2016-17)	TBD	\$850,000
Proposition K (Lighting & Shade Structure)		
Prop K K-17 (8th Cycle) (C227-8 - PY 17; FY 2013-14)	43K/10/10KM20	\$50,000
Prop K K-18 (8th Cycle) (C227-8 - PY 18; FY 2014-15)	43K/10/10LM20	\$200,000
Prop K K-19 (FY-17-18) (C227-8 - PY 20; FY 2016-17)	TBD	\$250,000
Prop K Assessment Gap (FY 15-16)	TBD	\$1,750,000
Capital Improvement Expenditure Program	100/54/00L094	\$537,048
Sites and Facilities (15-16)	209/88/88M211	\$2,750,000
Sites and Facilities (16-17)	TBD	\$1,050,000
Municipal Improvement Corporation of Los Angeles (MICLA)	
MICLA (FY 14-15) - Appropriated	298/50/50LTRC	\$2,100,000
MICLA (FY 14-15) - Balance	TBD	\$5,400,000
MICLA (FY 15-16)	TBD	\$3,500,000
TOTAL		\$23,352,989

ENVIRONMENTAL IMPACT STATEMENT

In accordance with the requirements of CEQA, an MND was prepared based on an IS which determined that all potentially significant environmental effects would be mitigated to a level less than significant. The IS/MND was circulated to all interested parties and responsible agencies, and filed with the State Clearinghouse for a 30-day review and comment period from March 3, 2016 to April 1, 2016.

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Several comment letters were received on potential environmental effects that have been incorporated into the final IS/MND, copies of which have been provided to the Board for its review and consideration. However, the comments did not require any additional environmental analyses or substantive changes to the IS/MND.

A Mitigation Monitoring and Reporting Plan has been prepared that specifies all the mitigation measures identified in the IS/MND, which will either reduce to a level of insignificance or eliminate the potentially significant environment impact of the Project.

TREES AND SHADE

The Project Manager, Landscape Architect, and RAP Forestry Division have surveyed the trees on the site and determined that ninety-one (91) of the one hundred seventy-eight (178) existing trees may be removed due to placement of structures and walkways, poor health, and maintenance concerns. One hundred twenty-seven (127) new trees will planted that will be easier to maintain and provide adequate shade when mature. Two additional shade structures, covered with photovoltaic panels, will be constructed as part of the Phase 1 scope to shield the new bleachers adjacent to the Tennis courts and the new bleacher structure adjacent to the Stadium.

FISCAL IMPACT STATEMENT

The Project will be funded by a combination of the aforementioned funding sources. There is no immediate fiscal impact to RAP's General Fund. However, future operations and maintenance costs will be included in future RAP's General Fund.

This Report was prepared by Ohaji K Abdallah, Project Manager, Department of Public Works, Bureau of Engineering (BOE) Architectural Division and James R Tebbetts, Environmental Specialists, BOE, Environmental Management Group (EMG). Reviewed by Neil Drucker, Program Manager, Recreational and Cultural Facilities Program, BOE; Deborah Weintraub, Chief Deputy City Engineer, BOE; and Cathie Santo Domingo, Superintendent, Planning, Construction and Maintenance Branch.

LIST OF ATTACHMENTS

- CEQA Initial Study and Mitigated Negative Declaration (MND) and Environmental Effects/Initial Study Checklist and comments and responses.
- 2. Appendices to the MND to include the following:
 - Appendix A: Air Quality and Greenhouse Gas Analysis Technical Memorandum
 - Appendix B: Biological Resource Search Results
 - Appendix C: Cultural Resources Assessment
 - Appendix D: Geotechnical Data Report
 - Appendix E Noise and Vibration Impact Study
 - Appendix F Traffic Study
- 3. Mitigation Monitoring and Reporting Program, dated May, 2016.

Final Initial Study/ Mitigated Negative Declaration for

Rancho Cienega Sports Complex Project State Clearinghouse No. 2016031012



May 2016



City of Los Angeles



Department of Recreation and Parks



Bureau of Engineering Environmental Management Group

CIT OFFIC RC LOS ANC CALIFORNIA E MITIGATE (Article	TY OF LOS ANGELES CE OF THE CITY CLERK OOM 395, CITY HALL GELES, CALIFORNIA 90012 ENVIRONMENTAL QUALITY ACT D NEGATIVE DECLARATION e I, City CEQA Guidelines)			
LEAD CITY AGENCY AND ADDRESS: F 1 L	Public Works Bureau of Engineering 149 Broadway, Suite 600 os Angeles, CA 90015-2213	COUNCIL DISTRICT 10		
PROJECT TITLE: RANCHO CIENEGA SPOF (WO: E1907694)	RTS COMPLEX (CELES KING III) (G922)	T.G. Page 673, Grids C-1 and D-1		
PROJECT LOCATION: The project site is located at 5001 Rodeo Road in the West Adams-Baldwin Hills- Leimert Community and Council District 10 in the City of Los Angeles. The project site is bounded by the Los Angeles County Metropolitan Transportation Authority (Metro) Expo Line light rail transit system to the north, Dorsey High School to the east, Rodeo Road to the south, and La Brea Avenue on the west.				
DESCRIPTION: The proposed Rancho Cienega Sports Complex Project includes the development of an upgraded and expanded sports complex. The proposed project would construct a new 30,000 square-foot sports complex that would include a new indoor pool and bathhouse with a community room and fitness annex on the second floor; a new indoor gymnasium with office space, a running path, and a lookout deck on the second floor; a new tennis shop with restrooms and tennis overlook; a new stadium overlook with a concession stand, restrooms and a ticket office; installation of new driveways; and upgrades to existing parking areas. The proposed project would also renovate the existing City of Los Angeles Department of Recreation and Parks (RAP) maintenance yard and building as well as the existing refuse collection. Other site				

improvements include upgrades to existing parking, security lighting, additional stormwater and drainage infrastructure, landscaping, and hardscaping. The proposed project would be designed and constructed to meet the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Silver designation.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY:

FINDING: The **City Engineer** of the City of Los Angeles has determined the proposed project will not have a significant effect on the environment. See attached Initial Study.

SEE THE ATTACHED PAGES FOR ANY MITIGATION MEASURES IMPOSED

Any written objections received during the public review period are attached, together with the responses of the lead City agency.

THE INITIAL STUDY PREPARED FOR THIS PROJECT IS ATTACHED

PERSON PREPARING THIS FORM:	ADDRESS:	TELEPHONE
James R Tebbetts	Los Angeles, CA 90015	(213) 485-5732
SIGNATURE (Official):		DATE: ,
Maria Mar Environa	ting Environmental Affairs Officer ental Management Group	5/17/16

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- Geotechnical Data Report
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- Appendix F Traffic Study

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CITY OF LOS ANGELES CALIFORNIA ENVIRONMENTAL QUALITY ACT INITIAL STUDY

Council District:	10	Date:	May 2016
Lead City Agency:	Department of Public V	Vorks, Bure	eau of Engineering
Project Title:	Rancho Cienega Sport	s Complex	Project

I. INTRODUCTION

A. Purpose of an Initial Study

The California Environmental Quality Act (CEQA) was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of proposed projects; identifying means of avoiding environmental damage; and disclosing to the public the reasons behind a project's approval even if it leads to environmental damage. The Bureau of Engineering Environmental Management Group has determined that the proposed project is subject to CEQA and no exemptions apply. Therefore, the preparation of an Initial Study (IS) is required.

An IS is a preliminary analysis conducted by the lead agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, with incorporation of mitigation, may have a significant effect on the environment, an Environmental Impact Report (EIR) should be prepared; otherwise the lead agency may adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND).

The IS/MND contained herein has been prepared in accordance with CEQA (Public Resources Code §21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.), and the City of Los Angeles CEQA Guidelines (1981, amended July 31, 2002).

B. Document Format

This Final IS/MND is organized into ten sections as follows:

<u>Section I, Introduction</u>: provides an overview of the project and the CEQA environmental documentation process.

<u>Section II, Project Description:</u> provides a description of the project location, project background, project components, and proposed construction and operation.

<u>Section III, Existing Environment:</u> provides a description of the existing environmental setting with focus on features of the environment that could potentially affect the proposed project or be affected by the proposed project.

<u>Section IV, Environmental Effects/Initial Study Checklist:</u> presents the City of Los Angeles' Checklist for all impact areas and mandatory findings of significance. This Section includes a discussion of the environmental effects and identifies applicable mitigation measures.

<u>Section V, Mitigation Measures:</u> provides the mitigation measures that would be implemented to ensure that potential adverse impacts of the proposed project would be reduced to a less than significant level.

<u>Section VI, Preparation and Consultation:</u> provides a list of key personnel involved in the preparation of this report and key personnel consulted.

<u>Section VII, Determination – Recommended Environmental Documentation:</u> provides the recommended environmental documentation for the proposed project.

<u>Section VIII, References:</u> provides a list of reference materials used during the preparation of this report.

<u>Section XI, Clarifications and Modifications:</u> provides a list of revisions intended to update the IS/MND in response to the comments received during the public review period.

<u>Section X, Response to Comments:</u> provides individual responses to the comments received during the public review period.

C. CEQA Process

The proposal to adopt a ND (or MND) initiates a 20-day public comment period, 30 days if a State Agency is involved. The purpose of this comment period is to provide public agencies and the general public an opportunity to review the IS and comment on the adequacy of the analysis and the findings of the lead agency regarding potential environmental impacts of the proposed project. If a reviewer believes there is substantial evidence that the project may have a significant effect on the environment, the reviewer should (1) identify the specific effect, (2) explain why it is believed the effect would occur,

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and (3) explain why it is believed the effect would be significant. Facts or expert opinion supported by facts should be provided as the basis of such comments.

Prior to making a determination, the decision-making body (for this proposed project, it is the Department of Recreation and Parks Board of Commissioners) must consider the IS together with any comments received during the public comment review process. The decision-making body would adopt the IS only if it finds, on the basis of the whole record before it, that there is no substantial evidence that the project would have a significant effect on the environment and that the study reflects the lead agency's independent judgment and analysis.

Public notification of agenda items for the Department of Recreation and Parks Board of Commissioners is posted 72 hours prior to the public meeting. The agenda for the Department of Recreation and Parks Board of Commissioners can be obtained via the internet at: http://www.laparks.org/commissionerhtm/2016/16agendas.htm. However, the official electronic website posting location for the agendas for the meetings of the Department of Recreation and Parks Board of Commissioners and its Task Forces is at www.lacity.org.

If the project is approved, the City would file a Notice of Determination (NOD) with the County Clerk within 5 days. The NOD would be posted by the County Clerk within 24 hours of receipt. This begins a 30-day statute of limitations on legal challenges to the approval under CEQA. The ability to challenge the approval in court may be limited to those persons who objected to the approval of the project, and to issues which were presented to the lead agency either orally or in writing, during the public comment period.

As a covered entity under Title II of the *Americans with Disabilities Act* (ADA), the City of Los Angeles does not discriminate on the basis of disability and, upon request, would provide reasonable accommodation to ensure equal access to its programs, services, and activities.

II. PROJECT DESCRIPTION

A. Introduction

The proposed Rancho Cienega Sports Complex Project (proposed project) includes the development of an upgraded and expanded sports complex in the City of Los Angeles Council District 10. The proposed project would construct a new 30,000 square-foot sports complex that would include a new indoor pool and bathhouse with a community room and fitness annex on the second floor; a new indoor gymnasium with office space, a running path, and a lookout deck on the second floor; a new tennis shop with restrooms and tennis overlook; a new stadium overlook with a concession stand, restrooms and a ticket office; installation of new driveways; and upgrades to existing parking areas. The proposed project would also renovate the existing City of Los Angeles Department of Recreation and Parks (RAP) maintenance yard and building as well as the existing refuse collection. Other site improvements include upgrades to existing parking, security lighting, additional stormwater and drainage infrastructure, landscaping, and hardscaping. The

proposed project would be designed and constructed to meet the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Silver designation. Examples of sustainable design features include solar panels, electric vehicle charging stations, use of recycled building materials and LED lighting.

B. Location

The project site is located at 5001 Rodeo Road in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The project site is bounded by the Los Angeles County Metropolitan Transportation Authority (Metro) Expo Line light rail transit system to the north (along Exposition Boulevard), Dorsey High School to the east, residential land uses to the south across Rodeo Road, and commercial uses to the west. Regional access to the project area is provided via Interstate 10 (I-10) and Interstate 405 (I-405). Figure 1 shows the regional location of the project site. Figure 2 shows the project site vicinity.

C. Setting

The project site is currently developed as a sports complex. The existing complex contains a variety of facilities including a gymnasium, basketball courts, baseball diamond, child play area, community room, football field, handball courts, picnic tables, soccer field, skate park, and tennis courts.¹ The sports complex also includes the Jackie Robinson Stadium, used for football games, track and field events, concerts, and other special events, and the Celes King III Pool facility, an indoor year-round pool used for various pool programs. Vehicular access to the project site is provided via Rodeo Road on the south side and via Exposition Boulevard on the north side. The primary parking lot is located along the southern boundary adjacent to Rodeo Road. An additional parking area is located in the northwest area of the complex. Figure 3 shows the existing facilities on the project site, including those facilities that are to be demolished as part of the proposed project.

The area surrounding the project site is fully developed and highly urbanized, and characterized by single and multiple family residences, industrial uses, commercial uses, and public facilities.² The properties to the north of the project site are developed with industrial uses; industrial and commercial uses are located to the west of the project site; residential uses are located to the south across Rodeo Road; educational institutions are located to the east.

D. Background

The proposed project will be constructed using a combination of federal and local funds. Funding may include U.S. Department of Housing and Urban Development (HUD)

¹ City of Los Angeles Department of Recreation and Parks, Rancho Cienega Sports Complex. Website: http://www.laparks.org/dos/reccenter/facility/ranchocienegaRC.htm, accessed September 30, 2015.

² City of Los Angeles Department of City Planning, West Adam-Baldwin Hills-Leimert Community Plan Generalized Land Use Map. Website: http://planning.lacity.org/complan/central/pdf/genlumap.wad.pdf, accessed September 24, 2015.







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Rancho Cienega Sports Complex Project Final Initial Study/Mitigated Negative Declaration





Rancho Cienega Sports Complex Project Final Initial Study/Mitigated Negative Declaration

Page 7 May 2016 Community Development Block Grant (CDBG), Proposition K (The LA For Kids Program), Capital Improvement Expenditure Program, and Quimby Act funds.

E. Purpose

The overall purpose for the proposed project is to construct a community sports complex to better meet the community's recreational needs. The existing sports complex is insufficient to handle the current park programs due to its size and infrastructure. The gymnasium's aging infrastructure has become a maintenance concern. Additionally, the existing indoor pool (Celes King III Pool) no longer meets the standards for competition pools. The need for a fitness annex and multipurpose room has been made evident by the community's use of the existing childcare facility to accommodate those functions.

The objectives of the proposed project are:

- To provide a sports complex that includes a variety of recreational amenities that meet the needs of the surrounding community, as well as the energy conservation and sustainable design goals of the City.
- To provide modernized and improved facilities at the sports complex to better meet the park programs.
- To upgrade the aging infrastructure of the existing park in order to improve operational and maintenance functions.

F. Proposed Project

The proposed project would be implemented in two phases. The components proposed to be implemented in each phase are described below. The detailed construction process and schedule for both phases is described in Subsection G, Project Construction. The proposed project would be designed and constructed to meet LEED Silver designation. Figure 4 depicts the proposed project facilities.

Phase 1

Phase 1 would include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the project site and include the following:

• Indoor Gymnasium: Demolition of the existing gymnasium and construction of a new, approximately 24,000-square-foot indoor gymnasium east of the Jackie Robinson Stadium and north of the primary parking lot. The proposed indoor gymnasium would include office space, a running path, and a lookout deck on the mezzanine level, and a second floor walkway that would connect the proposed indoor gymnasium to the proposed indoor pool.

- **Indoor Pool and Multiuse Building**: Demolition of the existing restroom facilities and construction of a new, approximately 25,000-square-foot indoor pool and bathhouse facility in the central portion of the property adjacent to the existing childcare center and north of the proposed primary parking area. The new indoor pool facility would include a bathhouse, restrooms, lockers, and changing rooms on the ground floor, and a community room, fitness annex, and kitchen on the mezzanine level.
- **Tennis Shop/Overlook**: Demolition of the existing tennis shop located directly north of the Celes King III Pool, and construction of a new 1,900-square-foot tennis shop and restroom facility to the west of and adjacent to the existing tennis courts, and east of the existing childcare center. A new overlook would be constructed on the mezzanine level to provide a viewing area of the tennis courts.
- Stadium Overlook/Concession Stand: Construction of a new stadium overlook and concession stand east of and adjacent to the existing stadium. The facility would include a include a concession stand, restrooms, and a ticket office on the ground level, and a stadium overlook on the mezzanine level, totaling approximately 4,000 square feet.
- **Playground**: Demolition of the existing playground located between the existing childcare center and tennis courts, in order to accommodate the new tennis shop and restroom facility. A new playground would be constructed directly west of the proposed tennis shop.
- **Primary Parking Lot**: Grading of the existing parking lot located along Rodeo Road and driveway improvements.

Phase 2

Phase 2 would include demolition of the concrete surrounding the existing RAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The majority of the Phase 2 activities would occur in the western and northwestern portion of the project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the project site. The Phase 2 components include the following:

- **RAP Maintenance Yard and Refuse Collection Center**: Rehabilitation of the existing RAP maintenance building and relocation of the RAP maintenance yard adjacent to the northwest corner of the Jackie Robinson Stadium. A new maintenance yard and refuse collection center would be constructed adjacent to the rehabilitated RAP maintenance building.
- Northwestern Driveway: Construction of a new driveway at the northwestern boundary of the project site. The driveway would extend towards Exposition

PUBLIC WORKS – BUREAU OF ENGINEERING



Rancho Cienega Sports Complex Project Final Initial Study/Mitigated Negative Declaration

Page 10 May 2016 Boulevard that currently ends at the parking lot on the northwestern part of the property.

- **Controlled Driveway**: Construction of a new controlled driveway at the southwest corner of the project site near the Jackie Robinson Stadium. The driveway would allow only right-in/right-out access from Rodeo Road when additional parking is required for special events or community programs. Bollards would be located at the driveway to prohibit access during normal operations.
- **Off-street Parking**: Installation of off-street parking along the western boundary of the project site, adjacent to the Jackie Robinson Stadium. Additional off-street parking would be installed along the northwestern boundary of the project site, adjacent to the new driveway and Metro Expo Rail Line. With installation of off-street parking, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements.
- **Overflow Parking/Multipurpose Field**: Alteration of the existing parking lot in the northwestern portion of the project site to a new multipurpose field and overflow parking area. Based on scheduling, the overflow parking area could be used as a multipurpose field for sporting events or for overflow parking. When used for parking, an additional 88 spaces would be available to park patrons, for a total of 499 parking spaces in the overall park.
- **Community Garden:** Construction of a one-acre community garden in the northwestern portion of the project site, north of Jackie Robinson Stadium and adjacent to the proposed overflow parking/multipurpose field.

G. Project Construction

The construction of the proposed project is anticipated to begin in December 2016 and would occur for approximately 27 months, ending in March 2019. Phase 1 activities would last approximately 17 months and Phase 2 activities would last approximately 10 months.

Construction of the proposed project would entail the delivery of building materials such as concrete, lumber, landscaping materials, etc. Construction staging of equipment and materials would occur within a portion of the primary parking lot along Rodeo Road and the overflow parking lot at the rear of the complex off of Exposition Boulevard. Trucks delivering construction equipment and materials to the project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the project site. Alternatively, trucks carrying demolition debris from the project site would travel from the project site, west on Rodeo Road, and north on La Brea Avenue to I-10. Construction workers would park in the rear parking lot off of Exposition Boulevard to ensure parking is available for park patrons.

Project construction would occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. If

necessary, construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays and National Holidays. There would be no construction activities on Sundays or during prohibited hours.³

Phase 1

Demolition and Grading

Phase 1 would include demolition of the existing gymnasium, restroom facilities, and hazardous materials abatement activities. The existing playground and tennis shop would also be demolished. All other structures currently existing at the complex would remain in place, including the existing indoor pool facility (Celes King III Pool), athletic fields, Jackie Robinson Stadium, tennis courts, basketball courts, skate park, and childcare center.

This phase would include the demolition of existing concrete slabs, footings, and foundations. In addition, rough grading would occur to prepare the site for construction. Approximately 7,800 cubic yards of concrete slab, footings, and foundations would be exported from the project site.

For Phase 1, a total of approximately 11 construction workers would be on-site each day during demolition activities. Construction personnel would consist of 3 general contractor staff, 3 demolition contractor staff, 4 hazardous materials abatement contractor staff, and 1 street sweeper staff. A maximum of 4 truck trips per day is anticipated.

Construction

Phase 1 construction would begin with pile installation and foundation construction for all proposed structures. The anticipated depth of excavation to install the piles for the indoor pool and indoor gymnasium would be approximately 35 feet. Construction of the accessory structures such as the tennis shop/overlook and stadium overlook would occur in this phase and may be supported on a structural mat bearing on compacted fill rather than piles. Utility installations and construction of the playground would also occur during Phase 1.

Both the new indoor pool building and new indoor gymnasium would consist of two levels, including a ground level and a mezzanine level. The mezzanine level would be constructed approximately 15 feet above ground level. The indoor pool would extend to a maximum depth of approximately 12 feet below ground level. The two buildings would consist of a pre-fabricated metal frame structure and have corrugated metal wall panels on the south and north sides of the buildings. The panels would extend from approximately 10 feet to 39 feet above ground level.

Phase 1 construction would also include rough grading for the primary parking lot and site improvements, including landscaping and security lighting, around the new facilities.

³ City of Los Angeles Municipal Code, Section 41.40 Construction Noise.

A total of approximately 31 construction workers would be on-site each day during Phase 1 construction activities. Construction workers would consist of approximately 5 general contractor staff, 4 electrical subcontractor staff, 4 mechanical subcontractor staff, 4 plumbing subcontractor staff, 6 concrete contractor staff, 4 pile subcontractor staff, and 4 landscape subcontractor staff. An average of 2 truck trips per day is anticipated.

The estimated construction equipment to support Phase 1 activities would include:

- 1 demolition excavator
- 2 articulating dump trucks
- 1 backhoe
- 2 pile drivers
- 1 street sweepers
- 1 demolition roller
- Concrete trucks (provided as needed during major concrete pours)
- 1 all-terrain articulating crane
- 1 compactor
- 1 skid loader
- 1 asphalt paver

Phase 2

As previously mentioned, Phase 2 would commence after Phase 1 activities have been completed.

Demolition and Grading

Phase 2 demolition would consist of concrete demolition surrounding the existing RAP maintenance yard and along the western and northwestern boundaries of the project site. Utility adjustments and any necessary upgrades would also be completed. Approximately 6,800 cubic yards would be exported from the site to prepare for parking lot and other site improvements.

A total of approximately 6 construction workers would be on-site each day during Phase 2 demolition. Construction workers would consist of 2 general contractor staff, 2 demolition contractor staff, 1 hazardous materials abatement contractor staff, and 1 street sweeper staff. A maximum of 4 truck trips per day is anticipated.

Construction

Following demolition, the existing RAP maintenance building would be rehabilitated to improve operations. The RAP maintenance yard would be relocated and a new refuse collection center would be constructed adjacent to the rehabilitated RAP maintenance

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building. Phase 2 construction would also consist of landscaping the remainder of the park, installing additional stormwater and drainage infrastructure, and installing pedestrian pathways, permeable pavers, and vegetative swales. Additionally, a new controlled driveway would be installed fronting Rodeo Road at the west property line; a new driveway would be constructed at the northwestern boundary of the project site; off-street parking areas in the northwestern portion of the property and along the western boundary would be constructed; and a community garden and secondary parking/multipurpose field would be constructed in the northwest corner.

A total of approximately 23 construction workers would be on-site each day during Phase 2 construction activities. Construction workers would consist of 2 general contractor staff, 4 electrical subcontractor staff, 1 mechanical subcontractor staff, 2 plumbing subcontractor staff, 6 concrete subcontractor staff, and 8 landscape subcontractor staff. An average of 2 truck trips per day is anticipated.

The estimated construction equipment to support Phase 2 activities would include:

- 1 demolition excavator
- 1 articulating dump truck
- 2 backhoes/skip loaders
- 1 demolition roller
- Concrete trucks (provided as needed during major concrete pours)
- 1 compactor
- 1 street sweeper
- 1 asphalt paver

Best Management Practices (BMPs)

An appropriate combination of monitoring and resource impact avoidance would be employed during all the construction activities, including implementation of the following Best Management Practices (BMPs):

- Construction activity would comply with the allowable hours of construction as dictated in the *Los Angeles Municipal Code Section 41.40*, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays.
- The proposed project would be designed, constructed, and operated following all applicable laws, regulations, ordinances and formally adopted City standards (e.g., *Los Angeles Municipal Code* and *Bureau of Engineering Standard Plans*).
- The proposed project would implement Rule 403 fugitive dust control measures required by the South Coast Air Quality Management District (SCAQMD), which requires reasonable precautions to be taken to prevent visible particulate matter

from being airborne, under normal wind conditions, beyond the property from which the emission originates. Reasonable precautions include, but are not limited to the following:

- Application of water on dirt roads, material stockpiles, and other surfaces that can give rise to airborne dusts; and
- Maintenance of roadways in a clean condition.
- The construction contractor would develop and implement an erosion control plan and Storm Water Pollution Prevention Plan for construction activities. Erosion control and grading plans may include, but would not be limited to, the following:
 - o Minimizing the extent of disturbed areas and duration of exposure;
 - Stabilizing and protecting disturbed areas;
 - Keeping runoff velocities low; and
 - Retaining sediment within the construction area.
 - Construction erosion control BMPs may include the following:
 - Temporary desilting basins
 - Silt fences
 - Gravel bag barriers
 - Temporary soil stabilization with mattresses and mulching
 - Temporary drainage inlet protection
 - Diversion dikes and interceptor swales
- The proposed project would comply with the Regional Water Quality Control Board's National Pollution Discharge Elimination System.
- Excavated soil and construction waste would be hauled to local yards to minimize traffic interruptions as well as possibility of general spills. Haul routes would be required to avoid residential streets and all trucks must use dust covers.
- The proposed project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the Citywide Construction and Demolition Debris Recycling Ordinance.

H. Operation and Maintenance

Operation and maintenance of the new sports complex would be the responsibility of RAP, similar to existing conditions. Following construction, the number of staff would

remain the same as existing conditions with 20 staff for the gymnasium and childcare center, 20 staff for the pool facility, and 10 maintenance staff.⁴

As the proposed project would update existing facilities at the sports complex, no additional parking would be required for project operations. Off-street parking areas would be installed along the northwestern boundary of the project site. However, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements. When the new multipurpose field is used for parking during special events, an additional 88 spaces would be available to park patrons, for a total of 499 parking spaces in the overall park. The complex would typically operate Mondays through Saturdays from 7:30 a.m. to 5:00 p.m. Special events, such as football games, would extend the operating schedule to 10:00 p.m. up to 25 times a year.

I. Project Actions and Approvals

The proposed project would require approval by the City of Los Angeles Board of Public Works and City Council. Additional anticipated approvals or permits for the proposed project include, but are not limited to, the following:

- State Water Resources Control Board/Los Angeles RWQCB project review and NPDES General Construction Permit, as applicable
- City of Los Angeles Department of Building and Safety, building and grading permits and review of import/export routes (haul routes)
- City of Los Angeles Department of Transportation, Traffic Control Plan review
- City of Los Angeles Department of Recreation and Parks, project and construction bid and award approval

The analysis in this document assumes that, unless otherwise stated, the proposed project would be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards (e.g., Los Angeles Municipal Code and Bureau of Engineering Standard Plans). Construction would follow the uniform practices established by the Southern California Chapter of the American Public Works Association (e.g., Standard Specifications for Public Works Construction and the Work Area Traffic Control Handbook) as specifically adopted by the City of Los Angeles (e.g., The City of Los Angeles Department of Public Works Additions and Amendments to the Standard Specifications For Public Works Construction [AKA "The Brown Book," formerly Standard Plan S-610]).

⁴ Staff numbers are based on increased need during summer months.

III. EXISTING ENVIRONMENT

The project site consists of the Rancho Cienega Sports Complex, located at 5001 Rodeo Road, approximately 6.5 miles southwest of downtown Los Angeles in the *West Adams-Baldwin Hills-Leimert Community Plan* and Council District 10 areas of the City of Los Angeles. The area surrounding the project site is fully developed and highly urbanized. Current land uses in the area consist of residential housing, light industrial and commercial use, and public lands. The project site is bounded by the Metro Expo Line light rail transit system to the north, Dorsey High School to the east, residential uses to the south across Rodeo Road, and commercial uses to the west. The project site is served by Rodeo Road and Martin Luther King Jr. Boulevard to the south, La Brea Avenue to the west, Exposition Boulevard to the north, and Farmdale Avenue to the east.

The project site totals approximately 30 acres and is zoned OS-1XL (Open Space).⁵ The project site has historically been used as a recreation facility, with the existing pool building (Celes King III Pool) being constructed in the 1960s.

The California Department of Conservation, California Geological Survey's Seismic Hazard Zonation Program Map indicates that the project site is not within an Alquist-Priolo Earthquake Fault Zone. The nearest fault zone to the project site is the Newport-Inglewood Fault which is located approximately 1.3 miles southwest of the site and no active faults are known to cross the project site.⁶ The project site is located within a designated liquefaction zone.⁷ The project site is not located within a 100-year floodplain, but is located within a 500-year (0.2-percent-annual-chance) floodplain.^{8,9}

IV. ENVIRONMENTAL EFFECTS/INITIAL STUDY CHECKLIST

This section documents the screening process used to identify and focus upon environmental impacts that could result from the proposed project. The IS Checklist below follows closely the form prepared by the Governor's Office of Planning and Research and was used in conjunction with the City's *L.A. CEQA Thresholds Guide* and other sources to screen and focus upon potential environmental impacts resulting from this project. Impacts are separated into the following categories:

⁵ City of Los Angeles Department of City Planning, ZIMAS. Website: http://zimas.lacity.org/, accessed August 27, 2015.

⁶ California Department of Conservation Division of Mines and Geology. *Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle*. Website: http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM/Hollywood_EZRIM.pdf, accessed August 27, 2015.

⁷ California Department of Conservation Division of Mines and Geology, *Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle.* Website: http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM/Hollywood_EZRIM.pdf, accessed August 27, 2015.

⁸ Federal Emergency Management Agency. Flood Map Service Center, *Flood Insurance Rate Map, Panel 1615.* Website: https://msc.fema.gov/portal/search, accessed August 27, 2015.

⁹ Federal Emergency Management Agency. Flood Zones Information. Website: http://www.fema.gov/flood-zones, accessed August 27, 2015.

- <u>No Impact.</u> This category applies when a project would not create an impact in the specific environmental issue area. A "No Impact" finding does not require an explanation when the finding is adequately supported by the cited information sources (e.g., exposure to a tsunami is clearly not a risk for projects not near the coast). A finding of "No Impact" is explained where the finding is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- <u>Less Than Significant Impact.</u> This category is identified when the project would result in impacts below the threshold of significance, and would therefore be less than significant impacts.
- <u>Less Than Significant After Mitigation.</u> This category applies where the incorporation of mitigation measures would reduce a "Potentially Significant Impact" to a "Less Than Significant Impact." The mitigation measures are described briefly along with a brief explanation of how they would reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be incorporated by reference.
- <u>Potentially Significant Impact.</u> This category is applicable if there is substantial evidence that a significant adverse effect might occur, and no feasible mitigation measures could be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required. There are no such impacts for the proposed project.

Sources of information that adequately support these findings are referenced following each question. All sources so referenced are available for review at the offices of the Bureau of Engineering, 1149 South Broadway, Suite 600, Los Angeles, California 90015.

Please contact James R. Tebbetts at (213) 485-5732 or at <u>james.tebbetts@lacity.org</u> for information regarding the environmental document. Please contact Ohaji K. Abdallah at (213) 485-4795 or at <u>ohaji.abdallah@lacity.org</u> for information regarding the proposed project.

Issues	Potentially Significant Impact	Less Than Significant With	Less Than Significant	No Impact
1. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?				\square
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Reference: L.A. CEQA Thresholds Guide (Sections A.1 and A.2); West Adams-Baldwin Hills-Leimert Community Plan

Comment: A scenic vista generally provides focal views of objects, settings, or features of visual interest; or panoramic views of large geographic areas of scenic quality, primarily from a given vantage point. A significant impact would occur if the proposed project introduced incompatible visual elements within a field of view containing a scenic vista or substantially altered a view of a scenic vista.

Scenic views or vistas are panoramic public views of various natural features, including the ocean, striking or unusual natural terrain, or unique urban or historic features. Public access to these views may be available from nearby parklands, private and public-owned sites, and public right-of-way.

The West Adams-Baldwin Hills-Leimert Community Plan does not delineate or designate any specific views as scenic vistas within the project area. The project area is located within an urban setting and is bounded by the Metro Expo Line light rail transit system to the north, Dorsey High School to the east, residential housing to the south across Rodeo Road, and commercial uses to the west. The project site is currently developed as a sports complex.

The proposed project would construct improved facilities at the existing Rancho Cienega Sports Complex. Construction of a new indoor pool, indoor gymnasium, and other proposed site improvements would improve the visual character of the area, compared to the existing conditions, by updating existing aging facilities and infrastructure and installing new landscaping, hardscaping, and a community garden. The new facilities and improvements may be visible from surrounding vantage points including the Kenneth Hahn State Recreation Area and would enhance views from the Metro Expo Line light rail. As such, the proposed project would not have an adverse effect on a scenic vista and no impact would occur.

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- b) Substantially damage scenic resources, including, limited to, trees, rock outcroppings, and historic buildings \square within a state scenic highway?
 - Reference: L.A. CEQA Thresholds Guide (Sections A.1 and A.2); City of Los Angeles General Plan; West Adams-Baldwin Hills-Leimert Community Plan; California Department of Transportation, California Scenic Highway Mapping System
 - Comment: A significant impact would occur where scenic resources within a state scenic highway were damaged or removed as a result of the proposed project.

The proposed project is not located along or near a designated California Scenic Highway or locally designated scenic highway. The nearest designated scenic highway is Route 110, also known as the Arroyo Seco Historic Parkway, which is located approximately 8.3 miles northeast of the project site. State Highway 1 (Pacific Coast Highway) is located approximately 6.2 miles southwest of the project site and is an eligible California Scenic Highway. Additionally, a portion of Crenshaw Boulevard, located approximately 0.8-mile east of the project site, is a locally designated scenic highway in the West Adams-Baldwin Hills-Leimert Community Plan. However, all parts of the proposed project would occur within the boundaries of the existing Rancho Cienega Sports Complex and the proposed project would not alter the use of the site. Additionally, no scenic resources such as groves of trees or rock outcroppings are located on the project site. The existing Celes King III indoor pool building is identified as a historic building; however, modifications to this building are not proposed as part of this project and the pool building would remain in its current condition. As such, no impact to scenic resources would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Reference: L.A. CEQA Thresholds Guide (Sections A.1 and A.2)

Comment: A significant impact would occur if the proposed project introduced incompatible visual elements to the project site or the area surrounding the project site.

The project site is located in a highly urbanized area in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The proposed project would construct improved facilities at the existing Rancho Cienega Sports Complex. The proposed project would improve the existing visual character and quality of the site and its surroundings as aging facilities and infrastructure would be updated and replaced through the construction of new facilities. Additionally,

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installation of landscaping, hardscaping, and a community garden would also improve the existing visual character and quality of the site. Constructing a new sports complex within the community would have a beneficial impact on the longterm visual quality of the project area.

The proposed project would be consistent with Chapter V, Urban Design, of the *West Adams-Baldwin Hills-Leimert Community Plan.* As discussed in the plan, "the intent of the design guidelines is to promote a stable and pleasant environment, with desirable character, for the residents and users of the community. These guidelines and standards ensure that new development or alterations/remodels to existing structures, make an aesthetic contribution to the built environment, provide public amenities, and increase neighborhood identity within the community plan area." The proposed project would adhere to the design guidelines discussed in the *West Adams-Baldwin Hills-Leimert Community Plan* by updating existing, aging facilities and creating an updated public space for the community.

The proposed project has the potential for short-term aesthetic effects during construction, due to grading and the storage of construction equipment and materials on-site. These effects would be temporary and occur within the property boundaries. As such, less than significant impacts to visual character would occur.

 d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Reference: L.A. CEQA Thresholds Guide (Section A.4)

Comment: A significant impact would occur if the proposed project caused a substantial increase in ambient illumination levels beyond the property line or caused new lighting to spill-over onto light-sensitive land uses such as residences, some commercial and institutional uses that require minimum illumination for proper function, and natural areas.

The project site is currently illuminated by existing lighting on-site and adjacent street lights along Rodeo Road to the south, and Exposition Boulevard and the Metro Expo Line to the north. Additional light sources associated with the adjacent commercial uses to the west and Dorsey High School to the east also illuminate the project site.

Project construction would occur during daylight hours and, therefore, would not require nighttime lighting. The proposed project would include installation of new security lighting around the new facilities, which would operate regularly. The

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nighttime lighting fixtures that would be installed would direct the majority of the light to within the sports complex, and away from sensitive areas, to the maximum extent feasible; however, spillover impacts could potentially occur at surrounding properties. Land uses adjacent to the project site are industrial, commercial, residential, and public facilities, and no sensitive land uses would be directly affected by the new sources of nighttime lighting. As such, the proposed project would not create a substantial source of light or glare that would result in adverse effects to day/nighttime views of the area. Impacts would be less than significant.

2. AGRICULTURE AND FOREST RESOURCES - Would the

project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?



- Reference: California State Department of Conservation Farmland Mapping and Monitoring Program; City of Los Angeles General Plan Conservation Element, Zone Information & Map Access System (ZIMAS)
- Comment: A significant impact would occur if the proposed project resulted in the conversion of state-designated agricultural land from agricultural use to a non-agricultural use.

No prime or unique farmland, or farmland of statewide importance exists within the project area or vicinity. The project site is not located on or near any property zoned or otherwise intended for agricultural uses. Therefore, no impact to statedesignated agricultural land would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Reference: California State Department of Conservation Farmland Mapping and Monitoring Program; *City of Los Angeles General Plan Conservation Element;* ZIMAS

Comment: A significant impact would occur if the proposed project resulted in the conversion of land zoned for agricultural use, or indicated under a Williamson Act contract, from agricultural use to a non-agricultural use.

No land on or near the project site is zoned for or contains agricultural uses. As the City of Los Angeles does not participate in the Williamson Act, there are no
Issues	Potentially	Significant Impact Less Than	Significant With Mitication	Less Than Significant	No Impact
Williamson Act properties within the project site. Therefore, no impact would occur.					
 c) Conflict with existing zoning for, or cause forest land (as defined in Public Resources O 12220(g)) or timberland (as defined in Public Code Section 4526)? 	rezoning of, Code section CResources				\square
References: City of Los Angeles General Pla	<i>n</i> ; ZIMAS				
Comment: A significant impact would occur if an existing zoning classification of forest la of an area classified as forest land or timbe	the proposed p nd or timberland rland.	oject , or ca	conflic aused r	ted wit ezonir	ำ กฎ
The project site is zoned OS-1XL (Open Space) and is one of two community parks in the West Adams-Baldwin Hills-Leimert Community Plan Area. There are no forest land or timberland areas in the vicinity of the project. Therefore, the proposed project would not conflict with the existing zoning or cause rezoning of forest land or timberland resources, and no impact would occur.					
d) Result in the loss of forest land or conversional land to non-forest use?	on of forest				\boxtimes
References: Refer to Section 2 (c) above.					
Comment: Refer to Section 2 (c) above.					
e) Involve other changes in the existing environ due to their location or nature, could result in of farmland, to non-agricultural use or conversion land to non-forest use?	ment which, conversion sion of forest				\boxtimes
Reference: Refer to Section 2 (a) and 2 (c) al	oove.				
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Y – Would the project:								
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- 3. AIR QUALIT
 - a) Conflict with or obstruct implementation of the applicable air quality plan?
 - Reference: L.A. CEQA Thresholds Guide (Sections B1 and B2); South Coast Air Quality Management District, 2012 Air Quality Management Plan, 2012; City of Los Angeles General Plan; Rancho Cienega Sports Complex Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2015 (Appendix A)
 - Comment: A significant impact may occur if the proposed project would conflict with or obstruct implementation of the applicable air quality plan.

The SCAQMD monitors air quality within the project area and the South Coast Air Basin, which includes Orange County and portions of Los Angeles, Riverside, and San Bernardino counties. The South Coast Air Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south.

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. The South Coast Air Basin is currently designated as nonattainment for 8-hour ozone and particulate matter with aerodynamic diameter less than 2.5 microns (PM_{2.5}) for both state and federal standards and nonattainment for particulate matter with aerodynamic diameter less than 10 microns (PM_{10}) for the state standards.

The most recent Air Quality Management Plan (AQMP) was adopted by the SCAQMD in February 2013. The AQMP was prepared by SCAQMD in partnership with the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB), and is the legally enforceable blueprint for how the region will meet and maintain state and federal air quality standards.

Projects that would be consistent with the 20122013 AQMP would be considered less than significant for this impact. Consistency with the AQMP is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the air quality standards.

The use of construction equipment in the AQMP is estimated for the region on an annual basis, and construction-related emissions are estimated as an aggregate

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in the AQMP. The project would not increase the assumptions for off-road equipment use in the AQMP.

Consistency with the AQMP is also determined through evaluation of whether the project would exceed the estimated emissions used as the basis of the AQMP, which are based, in part, on population projections developed by the Southern California Association of Governments (SCAG) for the Regional Transportation Plan. The SCAG forecasts are based on local general plans and other related documents, such as housing elements, that are used to develop population projections and traffic projections.

The proposed project is consistent with the existing zoning (OS-1XL, Open Space) for the site. In addition, there would be no significant net increase in facility capacity during project operations. Therefore, the proposed project would not substantially increase population or employment in the planning area and would not generate vehicle trips that exceed the current assumptions used to develop the *City of Los Angeles General Plan, Regional Transportation Plan*, and AQMP. Therefore, it is reasonable to assume that the intensity of operational emissions have been accounted for in the <u>20122013</u> AQMP. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Reference: L.A. CEQA Thresholds Guide (Sections B1 and B2); South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993; Rancho Cienega Sports Complex Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2015 (Appendix A)

Comment: A significant impact may occur if the proposed project would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction

Construction of the proposed project would result in the temporary generation of reactive organic gases (ROG), carbon monoxide (CO), oxides of nitrogen (NO_x), PM_{10} and $PM_{2.5}$ emissions from site preparation, demolition, and construction of project components. ROG, NO_x, and CO emissions are primarily associated with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive particulate matter (PM) dust emissions are primarily associated with site preparation, excavation, and grading activities and vary as a function of such parameters as soil silt content, soil moisture, wind speed,

Issues	Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant

acreage of disturbance area, and miles traveled by construction vehicles on- and off-site.

Construction of the proposed project is anticipated to begin in December 2016 and would occur for approximately 27 months. Construction of the proposed project would occur in two phases. Phase 1 would include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the project site and would last approximately 17 months.

Phase 2 would include demolition of the concrete surrounding the existing RAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The majority of the Phase 2 activities would occur in the western portion of the project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the project site. Phase 2 activities would last approximately 10 months, with construction of the proposed project being completed in March 2019.

Construction-related emissions associated with typical construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod allows the user to enter project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. Construction-related exhaust emissions for the proposed project were estimated for construction worker commutes, haul trucks, and the use of off-road equipment. The main haul route for trucks delivering construction equipment and materials to the project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the project site. Alternatively, trucks carrying demolition debris from the project site would travel from the project site, west on Rodeo Road, and north on La Brea Avenue to I-10.

As shown in Table 1, construction emissions for the proposed project would result in maximum daily emissions of approximately 8 pounds of ROG, 28 pounds of NO_x , 24 pounds of CO, 7 pounds of PM_{10} and 2 pounds of $PM_{2.5}$. This conservative estimate of maximum daily emissions would not exceed any of the thresholds of significance. Additional modeling assumptions and details are provided in Appendix A.

As shown in Table 1, construction-generated emissions of ROG, NO_X , CO, PM_{10} , and $PM_{2.5}$ would not exceed applicable daily emission thresholds established by

the SCAQMD and the City of Los Angeles. Therefore, construction emissions would not violate an ambient air quality standard or contribute substantially to an existing violation.

Localized Construction Emissions

Localized emissions of criteria air pollutants and precursors were assessed in accordance with SCAQMD's local significance thresholds (LST) guidance. SCAQMD recommends that lead agencies perform project-specific air quality modeling for projects larger than five acres. For projects less than five acres, the SCAQMD has developed look-up tables showing the maximum mass emissions that would not cause an exceedance of any LST. Since the proposed project site is approximately 30 acres, peak daily localized emissions were estimated using dispersion modeling in general accordance with the SCAQMD guidance. Air dispersion modeling was conducted to examine maximum short term impacts at the onsite After-School Child Care Center (occupied from 3:00 p.m. to 6:00 p.m), Dorsey High School and surrounding residential housing.

	Estimated Emissions (lbs/day)					
	ROG	NOx	CO	PM ₁₀	PM _{2.5}	
Phase 1						
2016	2.09	20.37	18.49	5.99	1.69	
2017	7.15	18.43	17.18	2.11	1.19	
2018	8.10	27.58	24.03	2.92	1.66	
Phase 2						
2018	3.01	19.44	22.19	7.26	1.51	
Maximum Daily Emissions	8.10	27.58	24.03	7.26	1.69	
Significance Threshold	75	100	550	150	55	
Exceed Significance?	No	No	No	No	No	

Table 1Maximum Daily Regional Construction Emissions

Source: Estimated by AECOM in 2015

The Environmental Protection Agency (EPA) recommends the use of the American Meteorological Society/EPA Regulatory Model (AERMOD) modeling system for use in modeling multi-source emissions and was used for this analysis. General source set up followed the SCAQMD's Final Localized Significance Threshold Methodology and assumed that emissions from off-road vehicles are best characterized by volume sources. Therefore, for the purposes of the dispersion modeling, the project has been divided into three phases:

- Demolition and hazardous materials abatement of the indoor gymnasium, restrooms, playground and tennis shop (Phase 1A);
- Construction of the new indoor gymnasium, indoor pool and multiuse building, tennis shop and overlook, stadium overlook, playground, and parking lot improvements (Phase 1B); and
- Demolition and construction of the RAP maintenance yard and refuse collection center, off-street parking and driveways, community garden, and overflow parking/multipurpose field (Phase 2).

A full discussion of the dispersion modeling methodology and the parameters used (surface considerations, volume and area sources, and receptor locations) is included in Appendix A.

Table 2 presents the maximum unmitigated localized emission concentrations during a single day of construction that may potentially impact the school and nearby residences.

As shown in Table 2, modeled concentrations during Phase 1 construction activities exceed the LST for NO_2 emissions. Therefore, construction emissions could violate an ambient air quality standard or contribute substantially to an existing violation. This impact would be potentially significant. To reduce construction-related emissions, the proposed project shall implement all applicable control measures for the duration of the construction period.

Mitigation Measures AQ-1 and AQ-2 are required as follows:

<u>Mitigation Measure AQ-1</u>: The construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.

<u>Mitigation Measure AQ-2:</u> The construction contractor shall implement activity management (e.g. rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts) to the greatest extent possible.

Table 2						
Unmitigated On-Site Emissions Highest Overall Model Result from						
Child Care Center and Offsite Impacts						

	C	0	NO ₂ ⁽¹⁾	PN	I ₁₀	PM _{2.5}
	Averagi	ing Time				
	1-Hour	8- Hour	1-Hour	Annual	24-Ho	ur
Phase 1A: Demolition						
Maximum Modeled Concentration (µg/m ³)				0.01	4.58	1.14
Maximum Modeled Concentration (ppmv)	0.32	0.14	0.26			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m 3	10.4 µg/m ³
Significant Impact?	No	No	YES	No	No	No
Phase 1B: Construction						
Maximum Modeled Concentration (µg/m ³)				0.59	2.32	0.91
Maximum Modeled Concentration (ppmv)	0.75	0.23	0.56			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m	10.4 µg/m ³
Significant Impact?	No	No	YES	No	No	No
Phase 2: Demolition and Construct	ion					
Maximum Modeled Concentration (µg/m ³)				0.12	7.22	1.76
Maximum Modeled Concentration (ppmv)	0.28	0.08	0.17			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m	10.4 µg/m ³
Significant Impact?	No	No	No	No	No	No

(1) EPA default NO_X to NO_2 conversion rates of 0.8 (1-hour NO_2) applied to modeled NO_x concentrations.

Emission reductions were estimated for Mitigation Measure AQ-1 (use of Tier 4 engines). Potential reductions were not estimated for Mitigation Measure AQ-2 because the extent to which it would be incorporated into construction of the proposed project is unknown. Table 3 shows the maximum localized concentrations based on the mitigated emissions during a single day of construction that may potentially impact the school and nearby residences. As shown in Table 3, the mitigated NO₂ emission concentrations would not exceed the SCAQMD threshold of significance with the implementation of Mitigation

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Measures AQ-1 and AQ-2. Therefore, implementation of Mitigation Measures AQ-1 and AQ-2 would reduce significant impacts of NO_x emissions to a less than significant level.

As shown in Tables 1 and 3, the maximum daily construction-generated emissions and emission concentrations of ROG, NO_X , CO, PM_{10} , and $PM_{2.5}$ would not exceed applicable mass emission or localized significance thresholds established by SCAQMD. Therefore, construction emissions would not violate an ambient air quality standard or contribute substantially to an existing violation. With implementation of Mitigation Measures AQ-1 and AQ-2, impacts would be less than significant.

Table 3
Modeling Results (Highest Overall Model Result from
Child Care Center and Offsite Impacts)

	CO		NO ₂ ⁽¹⁾	PM ₁₀	PM _{2.5}	PM _{2.5}	
	Averaging Time						
	1-Hour	8-Hour	1-Hour	Annual	24-Hour		
Phase 1A: Demolition							
Maximum Modeled				0.04	1.00	0.64	
Concentration (µg/m ³)				0.04	4.09	0.04	
Maximum Modeled	0.31	0.00	0.013				
Concentration (ppmv)	0.51	0.09	0.013				
I ST Threshold	20 0.000		0.18	1.0	10.4	10.4	
Lot meshold	Ppm	3 ppm	ppm	µg/m³	µg/m³	µg/m³	
Significant Impact?	No	No	No	No	No	No	
Phase 1B: Construction		_					
Maximum Modeled				0.004	0.07	0.03	
Concentration (µg/m ³)				0.004	0.07	0.03	
Maximum Modeled	0.69	0.21	0.065				
Concentration (ppmv)	0.03	0.21	0.005				
I ST Threshold	20 9 nnm	0.18	1.0	10.4	10.4		
Lot meshold	Ppm	n a bbin b		µg/m³	µg/m³	µg/m³	
Significant Impact?	No	No	No	No	No	No	
Phase 2: Demolition and Constr	uction	-					
Maximum Modeled	l			0.03	6 38	0.25	
Concentration (µg/m ³)				0.03	0.50	0.25	
Maximum Modeled	0.26	0.08	0.010				
Concentration (ppmv)	0.20	20 0.00					
I ST Threshold	20	9 nnm	0.18	1.0	10.4	10.4	
	Ppm ⁹ ppm		ppm	µg/m ³	µg/m ³	µg/m³	
Significant Impact?	No	No	No	No	No	No	

(1) EPA default NO_x to NO_2 conversion rates of 0.8 (1-hour NO_2) applied to modeled NO_x concentrations.

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Operation

Operation and maintenance of the new sports complex would be the responsibility of RAP, similar to existing conditions. Following construction, the number of staff would remain the same as existing conditions with 20 staff for the gymnasium and childcare center, 20 staff for the pool facility, and 10 maintenance staff. Therefore, operational emissions are anticipated to be similar to existing conditions. Impacts related to violation of air quality standards would be less than significant. No mitigation measures would be required.

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?
 - Reference: L.A. CEQA Thresholds Guide (Sections B1 and B2); Rancho Cienega Sports Complex Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2015 (Appendix A)
 - Comment: A significant impact would occur if the proposed project's incremental air quality effects are considerable when viewed in connection with the effects of past, present, and future projects.

The SCAQMD cumulative analysis focuses on whether a specific project would result in a cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the South Coast Air Basin, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The SCAQMD thresholds of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable incremental contribution to the existing cumulative air quality conditions. If a project's emissions would be less than those threshold levels, the project would not be expected to result in a considerable incremental contribution to the significant cumulative impact.

Because the proposed project would exceed the SCAQMD project-level air quality localized significance thresholds for NO_x emissions, the proposed project's construction emissions would have a cumulatively considerable contribution to the region's air quality. Therefore, the cumulative impact would be significant. As discussed above, the proposed project would not result in the generation of criteria air pollutant emissions at levels that exceed any of the

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SCAQMD regional and localized thresholds for construction or operational activities with implementation of Mitigation Measures AQ-1 and AQ-2. Therefore, with implementation of Mitigation Measures AQ-1 and AQ-2, impacts would be less than significant.

- d) Expose sensitive receptors to substantial pollutant
 - Reference: L.A. CEQA Thresholds Guide (Sections B1, B2, and B3); Rancho Cienega Sports Complex Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2015 (Appendix A)
 - Comment: A significant impact may occur if construction or operation of the proposed project generated pollutant concentrations to a degree that would significantly affect sensitive receptors.

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. These people include children, older adults, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a location such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. Sensitive receptors within the vicinity of the proposed project site include Dorsey High School adjacent and to the east, residences directly to the south across Rodeo Road, and residences to the west across La Brea Avenue. The project site also includes a childcare facility, which is open from 3:00 p.m. to 6:00 p.m.

Construction

The greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate matter (diesel PM) emissions associated with heavy-duty construction equipment operations. Heavy-duty construction equipment would operate during the 27-month construction period and would cease following buildout of the proposed project. As discussed above, AECOM performed dispersion modeling in general accordance with SCAQMD guidance for LST. Construction emissions would occur intermittently throughout the day and would not occur as a constant plume of emissions from the project site.

A health risk assessment (HRA) was performed to evaluate the emissions of TACs during construction activities and their effects on nearby receptors,

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Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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including the onsite after-school childcare facility (occupied from 3 p.m. to 6 p.m.), Dorsey High School and surrounding residential housing.

The HRA was performed in accordance with the new *Air Toxics Hot Spots Program Guidance Manual* for the Preparation of Risk Assessments (SRP Draft) developed by the Office of Environmental Health Hazard Assessment (OEHHA) for conducting HRAs in California under the Air Toxics "Hot Spots" Program, as well as methodologies from the Health Risk Assessments for Proposed Land Use Projects.

The HRA was performed outside the Hotspots Analysis and Reporting Program (HARP2) modeling system using the USEPA regulatory model AERMOD (version 15181), which estimates both short-term and long-term average ambient concentrations at receptor locations to produce exposure estimates. Excess lifetime cancer risks, chronic noncancer hazard index (HI), and acute noncancer HI were estimated as part of the HRA. The estimated excess lifetime cancer risks, chronic and acute noncancer HIs were compared to the thresholds for significance for TACs for a maximally exposed individual at an existing residential receptor (MEIR) and maximally exposed individual at an existing occupational worker receptor (MEIW).

The estimated cancer risk was based on the annual average diesel PM concentration, inhalation potency factor, and default estimates of breathing rate, body weight, and exposure period calculated by HARP2. In addition to the potential cancer risk, diesel PM may result in chronic non-cancer health impacts. There is no acute risk threshold for diesel PM. The exposure level is the concentration below which no adverse non-cancer health effects are anticipated.

Table 4 shows the maximum cancer risk, acute HI, and chronic HI for construction of the proposed project. The maximum cancer risk due to unmitigated construction emissions was determined to be 0.01 in 1 million for the Child Care Center, 0.01 in 1 million for the Adult Resident and 0.001 in 1 million for the Worker. The maximum chronic HI was determined to be 0.000002 for the MEIW and 0.000002 for the MEIR.

As shown in Table 4, the maximum health risks would not exceed 10 in 1 million. Therefore, the construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations that would result in a health risk. The impact would be less than significant.

Operation

The land uses associated with the proposed project would be consistent with the

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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existing conditions and are not typically sources of TAC emissions. Operation of the proposed project would primarily involve gasoline-fueled vehicles associated with worker and visitor commutes. No stationary sources of TAC emissions are anticipated to be located on the project site during long-term operation. Therefore, the proposed project's long-term operational activities would not generate substantial TAC emissions and would not expose sensitive receptors to substantial operational TAC concentrations. The impact would be less than significant.

Receptor Type	Maximum Cancer Risk (per million)	Maximum Acute HI	Maximum Chronic HI		
MEIR					
Offsite Resident	0.01	0.0	0.000002		
Child Care Center	0.01	0.0	0.000001		
MEIW	< 0.001	0.0	0.000002		
Threshold of Significance	10	1.0	1.0		
Significant Impact?	No	No	No		
Notes: HI= Hazard Index; MEIR = Maximally Exposed Individual Resident; MEIW = Maximally					

Table 4Maximum Construction Health Impacts for All Receptors

Notes: HI= Hazard Index; MEIR = Maximally Exposed Individual Resident; MEIW = Maximally Exposed Individual Worker Source: Estimated by AECOM in 2015

e) Create objectionable odors affecting a substantial number of people?

Reference: L.A. CEQA Thresholds Guide (Sections B1 and B2); Rancho Cienega Sports Complex Air Quality and Greenhouse Gas Analysis Technical Memorandum, 2015 (Appendix A)

Comment: A significant impact would occur if the project created objectionable odors during construction or operation that would affect a substantial number of people.

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. Odors from these sources would be

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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localized and generally confined to the immediate area surrounding the project site. The odors would be typical of most construction sites and temporary in nature.

Operation of the proposed project would not add any new odor sources. The project would not have any significant odor sources, and any odors generated would be similar to odors associated with the existing land uses. As a result, the proposed project's construction and operational activities would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

4. BIOLOGICAL RESOURCES – Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
 - Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan Conservation Element; California Department of Fish and Wildlife California Natural Diversity Database Biogeographic Data Branch; California Native Plant Society Rare Plant Program
 - Comment: A significant impact would occur if the proposed project removed or modified habitat for any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the state or federal regulatory agencies cited.

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing (Candidates) by the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS).^{10,11,12} The CNPS listing is sanctioned by CDFW and serves as their list of "candidate" plant

¹⁰ Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (Title 50 Code of Federal Regulations [CFR] 17.12 [listed plants], Title 50 CFR 17.11 [listed animals] and includes notices in the Federal Register for proposed species).

¹¹ Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14 California Code of Regulations 670.5).

¹² Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq.*).

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species that meet the definitions of the California Endangered Species Act (CESA), and are eligible for state listing.

Special-status wildlife species include those listed by the USFWS under the federal Endangered Species Act and by CDFW under CESA. USFWS and CDFW officially list species as either Threatened, Endangered, or as Candidates for listing. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the Migratory Bird Treaty Act (MBTA), and state protection under the California Environmental Quality Act (CEQA) Section 15380(d). All birds, except European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as guail, pheasant, and grouse, are protected under the MBTA. However, non-migratory game birds are protected under California Fish and Game Code Section 3503. Many other species are considered by CDFW to be California Species of Special Concern, and others are on a CDFW Watch List. The California Natural Diversity Database also tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a California Natural Diversity Database (CNDDB) rank. Although Species of Special Concern, CDFW Watch List species, and species that are tracked by the CNDDB are not formally listed or afforded official legal status, they may receive special consideration during the CEQA review process. CDFW further classifies some species as "Fully Protected," indicating that the species may not be taken or possessed except for scientific purposes, under special permit from CDFW. Additionally, California Fish and Game Code Sections 3503, 3505, and 3800 prohibit the take, destruction or possession of any bird, nest, or egg of any bird except English house sparrows and European starlings unless authorization is obtained from the CDFW.

A search of relevant regional databases for special-status biological resources in the vicinity of the project area was conducted. This included a nine-quad search based on the United States Geological Survey's Hollywood, CA quadrangle of CDFW's CNDDB and CNPS electronic Inventory. A review of these databases indicates that a combined total of 63 plant species from the CNDDB and CNPS, and 43 wildlife species from the CNDDB have been documented from the Hollywood and surrounding eight quadrangles. The CNDDB and CNPS lists are included in Appendix B.

The project site is located in the heavily-urbanized West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The site is currently developed with a sports complex consisting of a restroom facility, gymnasium, indoor pool building, childcare center, playground, tennis courts, soccer field, track field (Jackie Robinson Stadium), baseball/softball fields, skate park, and parking

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areas. No natural vegetation communities exist on-site. Ornamental vegetation, including silk floss (*Chorisia* sp.), eucalyptus (*Eucalyptus* sp.) bottlebrush (*Callistemon* sp.), southern magnolia (*Magnolia grandifolia*), ficus (*Ficus* sp.), and queen palm (*Syagrus romanzoffiana*) trees occur within the project site. Some trees will be removed to accommodate project construction.

The CNDDB indicates that a record of Brauton's milk-vetch (Astragalus brauntonii) and one of southern tarplant (Centromadia parryi ssp. australis) coincide with the project site. Both records are based on initial observations made in the early 1900s and these species are likely extirpated due to the urban developed nature of the project site and lack of potentially suitable habitat on-site to support these, or any other, special-status species. As a result, the proposed project would not result in a substantial adverse impact to listed, candidate, or otherwise sensitive special-status plant or wildlife species. However, due to the presence of ornamental trees which may provide suitable nesting habitat for birds protected under the MBTA, and which may be removed during construction, direct impacts to suitable nesting habitat could occur. Additionally, noise and dust generated during construction could indirectly impact nesting birds by causing them to avoid the area during construction. Should tree removal and construction activities occur during the nesting bird season, generally considered to extend from February 15 through September 15, the implementation of the avoidance and minimization measures provided in Mitigation Measure BIO-1 would reduce impacts to nesting birds to a less than significant level.

Mitigation Measure BIO-1 is required as follows:

<u>Mitigation Measure BIO-1:</u> Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed:

- 1. A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.
- 2. If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

If the recommended nest avoidance zone is not feasible, the qualified biologist

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant

shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?
- Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan Conservation Element; California Department of Fish and Wildlife California Natural Diversity Database Biogeographic Data Branch; CDFW Descriptions of the Terrestrial Natural Communities of California
- Comment: Sensitive natural communities are those that are designated as rare in the region by the CNDDB, provide potentially suitable habitat to support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act and/or Section 1600 et seq. of the California Fish and Game Code). Rare communities are given the highest inventory priority. Based on the review of the CNDDB, a total of seven sensitive vegetative communities have been recorded within the Hollywood and surrounding eight quadrangles. None of these records coincide with the project site. The site occurs in a heavily-urbanized community of the City of Los Angeles and no natural vegetation communities occur on-site. As a result, the proposed project would not adversely affect any sensitive natural community or riparian habitat. No impact would occur and no mitigation measures are required.
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?



- Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan; U.S.C. Title 33, Chapter 26, Sections 101-607
- Comment: A significant impact would occur if federally protected wetlands, as defined by Section 404 of the Clean Water Act, were modified or removed.

The *Clean Water Act of 1997* (CWA), as amended, provides for the restoration and maintenance of the physical, chemical, and biological integrity of the nation's waters. The act sets up a system of water quality standards, discharge

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limitations, and permit requirements. Activities that have the potential to discharge dredge or fill materials into jurisdictional waters of the U.S., which include those waters listed in 33 Code of Federal Regulations 328.3 (Definitions), are regulated under Section 404 of the Act, as administered by US Army Corps of Engineers (Corps). Section 401 of the CWA requires a water quality certification from the state for all permits issued by the Corps under Section 404 of the Clean Water Act. The Regional Water Quality Control Board (RWQCB) is the state agency in charge of issuing a CWA Section 401 water quality certification or waiver.

The Porter-Cologne Water Quality Control Act is the basic water quality control law for California and works in concert with the CWA. Under Section 13000 et seq. of Porter-Cologne Water Quality Control Act, the RWQCB is the agency that regulates discharges of waste and fill material within any region that could affect a water of the state (Water Code 13260[a]), (including wetlands and isolated waters) as defined by the California Water Code Section 13050(e). A permit under the Porter-Cologne Water Quality Control Act is required prior to a project's implementation, for impacts to water bodies and riparian habitat. Additionally, under Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement from CDFW is required prior to any activity that would result in the modification of the bed, bank, or channel of a state stream, river, or lake, including water diversion and damming and removal of vegetation from the floodplain to the landward extent of the riparian zone. This permit governs both activities that modify the physical characteristics of a stream and activities that may affect fish and wildlife resource that use a stream and surrounding habitat (i.e., riparian vegetation or wetlands).

The project site occurs in a heavily-urbanized community of the City of Los Angeles and no federal or state-protected wetlands or other waters coincide with the project site or would be affected by implementation of the project. As a result, no impacts would occur and no mitigation measures are required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?



Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan

Comment: A significant impact would occur if the proposed project interfered or removed access to a migratory wildlife corridor or impeded the use of native wildlife nursery sites.

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that encourages population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise foreign or inhospitable areas, such as urban/suburban tracts or highways. Two types of wildlife migration corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space, and local corridors, defined as those allowing resident wildlife to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development.

The project site occurs in a heavily-urbanized community of the City of Los Angeles and there are no surface waters, drainages, or other corridors that allow for wildlife movement on or within the vicinity of the project site. The site is not within an established wildlife corridor, and the proposed project would not interfere with the movement of any native wildlife species. As a result, the proposed project would not interfere with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, and would not impede the use of native wildlife nursery sites. However, as further described in Section 4(c), ornamental trees on-site may provide suitable nesting habitat for birds protected under the MBTA. Nesting birds may avoid the project vicinity due to increased levels of noise or dust during construction if it occurs during the nesting bird season (February 15 through September 15). Implementation of Mitigation Measure BIO-1 would reduce potential impacts on the movement and behavior of nesting birds to a less than significant level.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan; City of Los Angeles Department of Recreation and Parks Tree Care Manual

Comment: A significant impact would occur if the proposed project caused an impact that was inconsistent with local regulations pertaining to biological resources.

Native tree species that measure four inches or more in cumulative diameter, four and one-half feet above the ground, including native oak (*Quercus* spp.), southern California black walnut (*Juglans californica* var. *californica*), western

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sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*) are protected by the *Los Angeles Municipal Code*. Any tree grown or held for sale by a nursery, or trees planted or grown as part of a tree planting program, are not included in the definition of a protected tree. Should any of the species listed above that meet the size requirements need to be removed, relocated, or replaced, the proposed project would comply with the City's protected tree ordinance.

The City of Los Angeles Board of Public Works tree removal policy requires replacing street trees at a two-to-one ratio for trees that are removed from the right-of-way. RAP also has a tree replacement policy that can be found within the RAP's *Tree Care Manual*. The RAP tree replacement policy requires "whenever trees are removed, the existing trees' aggregate diameter, measures at breast height shall be replacement at an equal or greater rate of caliper of new trees." No trees within the right-of-way are currently slated for removal; however, should any of the trees within the right-of-way require removal, the proposed project would comply with the City's tree removal policy.

Ornamental sycamore trees are present on the south side of the building, along North Main Street. These trees would not be impacted by the proposed project and as a result, no impacts to trees protected under a tree preservation policy or ordinance would occur.

f) Conflict with the provisions of an adopted Habitat
 Conservation Plan, Natural Community Conservation
 Plan, or other approved local, regional, or state habitat

Reference: L.A. CEQA Thresholds Guide (Section C); City of Los Angeles General Plan

Comment: A significant impact would occur if the proposed project were inconsistent with the provisions of the adopted habitat conservation plans of the cited type.

The proposed project site is located in a heavily-urbanized community of the City of Los Angeles and does not coincide with the boundaries of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. As a result, the proposed project would not conflict with an approved conservation plan and no impact would occur.

conservation plan?

Issues	Potentially	Significant Impact	Less Than Significant	Mitigation	Less Than Significant	No Impact
5. CULTURAL RESOURCES – Would the project:						
 a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5? 	Ľ				\boxtimes	

Reference: L.A. CEQA Thresholds Guide (Section D.3); Draft Cultural Resources Assessment Rancho Cienega Sports Complex (Celes King III Pool) Project (Appendix C)

Comment: A significant impact would result if the proposed project caused a substantial adverse change to the significance of a historical resource.

A resource is generally considered "historically significant" if the resource meets at least one of the four criteria for listing on the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[a]). The CRHR is used as a guide by state and local agencies, private groups, and citizens to identify the state historical resources and to include which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR evaluation criteria are similar to the National Register criteria. For a property to be eligible for inclusion in the CRHR, it must meet one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of California history and cultural heritage;
- It is associated with the lives of persons important in our past;
- It 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
- It has yielded, or may be likely to yield, important information in prehistory or history.

Based on previous cultural surveys and reports for the project site and surrounding areas, 24 cultural resources, including five archaeological resources, 18 buildings, and one district were recorded in the study area (project site and 0.5-mile radius of the project site). However, none of these resources occur within the project site. One historic property that is listed in the National Register of Historic Places (NRHP) is adjacent to the project site. Five additional buildings that are listed as California Historical Landmarks are also located within 0.5-mile of the project site, but are not located on the project site.

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Based upon the CRHR evaluation criteria, one historic property was found on the project site that is eligible for listing in the NRHP and the CRHR. The Celes King III Pool is architecturally significant and meets NRHP Criterion C and CRHR Criterion 3 at the local level for its contribution of modern architectural design in Los Angeles. Its character-defining features include the stylized configuration of windows primarily on the south side of the building that continue on the east and west sides, its roof slope, and the presence of the indoor pool. However, this property would not be impacted during construction activities and would continue to operate as an indoor pool facility. Therefore, impacts to the identified historic resource during construction activities would be less than significant.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?
 - Reference: L.A. CEQA Thresholds Guide (Section D.3); Draft Cultural Resources Assessment Rancho Cienega Sports Complex (Celes King III Pool) Project (Appendix C)
 - Comment: A significant impact would occur if the proposed project caused a substantial adverse change in the significance of an archaeological resource, which falls under the CEQA Guidelines section cited above.

Archival research revealed that five prehistoric sites, including one burial site, are located less than 0.5-mile west of the site. The closest site is less than 0.15-mile west of the project site. Moreover, some of these are deeply buried by alluvium. For example, the human remains uncovered approximately 0.5-mile southeast of the project site lay up to 23 feet below the 1924 ground surface. Archaeological sites may also be buried by fill imported to reclaim the Rancho Cienega Sports Center during its development beginning in the 1930s.

The lack of surface evidence of archaeological materials does not preclude the possibility that subsurface archaeological materials may exist. The presence of alluvium may mean that any surface evidence of archaeological materials has been buried and could be encountered during excavation. Based on the results of this cultural resources assessment, the project site is culturally sensitive for prehistoric and/or historic archaeological resources.

Because the potential to encounter archaeological resources exists for this project, archaeological monitoring should be conducted during all ground-disturbing activities into native soils. Because of previous disturbances to the site, this depth is unknown. Mitigation Measure CULT-1 would be implemented to ensure that any potential impacts remain less than significant.

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Mitigation Measure CULT-1 is required as follows:

Mitigation Measure CULT-1: Archaeological monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full time. The archaeological monitor will have the authority to redirect construction equipment in the event potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery will halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5. In addition, it is recommended that the construction personnel and staff receive training on possible archaeological resources that may be present in the area in order to establish an understanding of what to look for during ground-disturbing activities.

If Native American cultural materials are encountered during projectrelated ground disturbance, a trained Native American consultant should be engaged to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as needed basis and would be intended to ensure that Native American concerns are taken into account during the construction process.

Therefore, with implementation of Mitigation Measure CULT-1, potential impacts to archeological resources during construction activities for the proposed project would be less than significant. In addition, no impact would occur from the operation of the proposed project.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Reference: L.A. CEQA Thresholds Guide (Section D.1); Draft Cultural Resources Assessment Rancho Cienega Sports Complex (Celes King III Pool) Project (Appendix C)

Comment: A significant impact would occur if grading or excavation activities associated with the proposed project disturbed unique paleontological resources or unique geologic features.

Archival research indicates that excavations near the project site extending into older Quaternary have encountered significant vertebrate fossils. In some places, Quaternary older alluvium and significant fossil remains may lay close to the surface. For example, the closest fossil locality recorded by the Natural History Museum of Los Angeles County, near the intersection of Rodeo Road and

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Sycamore Avenue, encountered a fossil horse at a depth of 6 feet below ground surface.

Because the project would be constructed in an area with known prehistoric and historic archaeological and paleontological sensitivity, prehistoric and/or historic archaeological resources and paleontological resources may be present within the project site. Such resources may lie beneath the surface obscured by pavement or vegetation. Because of the potential to encounter buried resources, paleontological monitoring is recommended during ground-disturbing activities in areas of paleontological sensitivity. Mitigation Measure CULT-2 would be implemented to ensure that any potential impacts remain less than significant.

Mitigation Measure CULT-2 is required as follows:

Mitigation Measure CULT-2: Excavations into undisturbed older Quaternary layers, which vary in depth within the project site, shall be monitored. Monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full-time. In the event that potential paleontological resources are encountered, a qualified paleontologist should be retained to recover and record any fossil remains discovered. Any fossils, should they be recovered, shall be prepared, identified, and catalogued before curation in an accredited repository designated by the lead agency.

Therefore, with implementation of Mitigation Measure CULT-2, potential impacts to paleontological resources during construction activities associated with the proposed project would be less than significant. In addition, no impact would occur from the operation of the proposed project.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Reference: L.A. CEQA Thresholds Guide (Section D.2); Draft Cultural Resources Assessment Rancho Cienega Sports Complex (Celes King III Pool) Project (Appendix C) Comment: A significant impact would occur if grading or excavation activities associated with the proposed project disturbed interred human remains.

No formal cemeteries are known to exist within the project site; however, prehistoric human remains were uncovered approximately 0.5-mile southeast of the project site. In the event that any human remains or related resources are discovered, Mitigation Measure CULT-3 would be implemented to ensure that any potential impacts remain less than significant.

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Mitigation Measure CULT-3 is required as follows:

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Mitigation Measure CULT-3: In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found during construction activities, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Therefore, with implementation of Mitigation Measure CULT-3, potential impacts related to the discovery of human remains would be less than significant. In addition, no impact is anticipated from the operation of the proposed project.

6. GEOLOGY AND SOILS – Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Reference: L.A. CEQA Thresholds Guide (Section E.1); California Department of Conservation Publication 42; City of Los Angeles General Plan Safety Element; Geotechnical Engineering Report Rancho Cienega Sports Complex, May 2015 (Appendix D)

Comment: A significant impact would occur if the proposed project were located within a state-designated Alquist-Priolo Zone or other designated fault zone and appropriate building practices were not followed.

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The project site is not located within a State of California Earthquake Fault Zone/Alquist-Priolo Special Study Zone. The project site is located in a seismically active area, as is most of southern California. The Newport-Inglewood fault is the closest fault to the project site and is located approximately 1.3 miles southwest of the site. Additionally, an active trace of the Newport-Inglewood fault may be within approximately 0.5-mile from the southwest portion of the project site. However, no active faults are known to cross the project site. The proposed project would be designed and constructed in accordance with all applicable federal, state, and local codes relative to seismic criteria. Therefore, the proposed project would not expose people or structures to potential adverse effects from the rupture of a known earthquake fault; and no impact would occur.

ii) Strong seismic ground shaking?



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- Reference: L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element; California Department of Conservation Publication 42
- Comment: A significant impact would occur if the proposed project design did not comply with building code requirements intended to protect people from hazards associated with strong seismic ground shaking.

As with most locations in southern California, the project site is susceptible to ground shaking during an earthquake. As indicated in Section 6 (a)(i) above, the project site is not located within an Alquist-Priolo Special Study Zone, and thus the potential for hazards associated with strong seismic ground shaking, such as ground surface rupture, affecting the site is considered low. The proposed project would be designed and constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. Therefore, the impact from strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Reference: L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element Exhibit B; California Department of Conservation Publication 42; Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle; Geotechnical Engineering Report Rancho Cienega Sports Complex., May 2015 (Appendix D)

Comment: A significant impact would occur if the proposed project were located in an area identified as having a high risk of liquefaction and appropriate

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design measures required within such designated areas were not incorporated into the project.

Liquefaction occurs when water saturated sediments are subjected to extended periods of shaking. Pressure increases in the soil pores temporarily alter the soil state from solid to liquid. Liquefied sediments lose strength, in turn causing the failure of adjacent infrastructure, including bridges and buildings. Whether a soil would resist liquefaction depends on a number of factors, including grain size, compaction and cementation, saturation and drainage, characteristics of the vibration, and the occurrence of past liquefaction. Granular, unconsolidated, saturated sediments are the most likely to liquefy, while dry, dense or cohesive soils tend to resist liquefaction. Liquefaction is generally considered to be a hazard where the groundwater is within 40 to 30 feet of the surface. With proper soil drainage, the pore pressure, which builds up when ground motion shakes unconsolidated soil, would be more easily dissipated; thus, soils with proper drainage are less likely to liquefy.

The project site is located within a state- and City-designated liquefaction area. In addition, the City of Los Angeles Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group completed a geotechnical investigation for the proposed project, the Geotechnical Engineering Report Rancho Cienega Sports Complex, which is included as Appendix D of this document. This investigation consisted of several tests to determine the liquefaction susceptibility of the project site. According to the criteria adopted by the Los Angeles Department of Building and Safety, in order to assume a soil is not susceptible, the soil must have a minimum plasticity index of 18. The tests conducted at the project site revealed that only one of the fine grained soils tested had a plasticity index less than 18. As such, impacts related to seismic-related ground failure and liquefaction could occur due to implementation of the proposed project. However, as discussed in the Geotechnical Engineering Report Rancho Cienega Sports Complex, the proposed project was determined to be geotechnically feasible provided that the recommendations presented in the report are incorporated into the design and construction of the proposed project. Adherence to Mitigation Measures GEO-1 and GEO-2 would reduce impacts related to seismic-related ground failure and liquefaction to less than significant.

Mitigation Measures GEO-1 and GEO-2 are required as follows:

<u>Mitigation Measure GEO-1</u>: The proposed project grading and foundation plans and specifications shall implement the recommendations presented in

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the Geotechnical Engineering Report Rancho Cienega Sports Complex prepared by the Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group. The proposed project plans and specifications shall also be reviewed by the Geotechnical Engineering Group to ensure proper implementation and application of the recommendations.

<u>Mitigation Measure GEO-2</u>: All grading, excavation, and construction of foundations should be performed under the observation and testing of the Geotechnical Engineer during the following stages:

- Demolition;
- Pile indicator program;
- Pile loading testing;
- Completion of site clearing;
- Site and pool excavation;
- Installation of shoring;
- Production pile installation;
- Subgrade preparation;
- Fill placement;
- Construction of structural mat foundations for accessory structures;
- Excavation and backfilling of all utility trenching; and
- When any unusual or unexpected geotechnical conditions are encountered.

With implementation of Mitigation Measures GEO-1 and GEO-2, potential impacts related to liquefaction during construction activities associated with the proposed project would be less than significant. In addition, no impact would occur from the operation of the proposed project.

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iv) Landslides?	

Reference: L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element Exhibit C; California Department of Conservation Publication 42

Comment: A significant impact would occur if the proposed project were located in an area identified as having a high risk of landslides and appropriate design measures required within such designated areas were not incorporated into the project.

The project is located in an area that is relatively flat and is not identified as a potential landslide hazard area by the California Department of Mines and Geology. Additionally, the project site is not located within a City-designated hillside area or earthquake induced landslide area. Therefore, the proposed project would not expose people or structures to potential adverse effects from landslides. No impact to landslides would occur.

b) Result in substantial soil erosion or the loss of topsoil?



Reference: L.A. CEQA Thresholds Guide (Section E.2)

Comment: A significant impact would occur if the proposed project exposed large areas to the erosion effects of wind or water for a prolonged period of time.

The proposed project would include ground-disturbing activities, such as excavation, grading and compaction of soil, landscaping, and paving. These activities could result in the potential for erosion to occur at the project site, though soil exposure would be temporary and short-term in nature. During construction, standard measures would be employed to minimize soil erosion and runoff. As discussed in Section II, Subsection G, in accordance with standard specifications for public works construction and building code requirements, the proposed project would require implementation of a Storm Water Pollution Prevention Plan (SWPPP) for erosion and sedimentation control. Additionally, the majority of the project site would be covered by landscaping and parking upgrades, potentially with permeable paving. No large areas of exposed soil would exist that would be exposed to the effects of erosion by wind or water. As such, the proposed project would have less than significant impact to erosion and loss of topsoil.

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- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
 - Reference: L.A. CEQA Thresholds Guide (Section C1); Geotechnical Engineering Report Rancho Cienega Sports Complex , May 2015 (Appendix D)
 - Comment: A significant impact would occur if the proposed project were built in an unstable area without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a hazard to life and property.

One of the major types of liquefaction induced ground failure is lateral spreading of mildly sloping ground. Lateral spreading involves primarily side-to-side movement of earth materials due to ground shaking, and is evidenced by near-vertical cracks to predominantly horizontal movement of the soil mass involved. As discussed in Sections 6 (a)(iii) and 6 (a)(iv), the project site is located in an area identified as being at risk for liquefaction, but is not located within a designated hillside area. All construction work would adhere to the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to liquefaction criteria. Additionally, implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related liquefaction to less than significant.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as the extraction of large amounts of groundwater, oil, or gas. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. However, the proposed project does not anticipate the extraction of any groundwater, oil, or gas from the project site. Therefore, no impacts to subsidence would occur.

Collapsible soils consist of loose dry materials that collapse and compact under the addition of water or excessive loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Soil collapse occurs when the land surface is saturated at depths greater than those reached by typical rain events. According to the geotechnical investigation conducted for the proposed project, the northeast portion of the project site is mapped as alluvium consisting of clay, sand, and gravel and the southwest portion is mapped as clay and sand of pre-development marshlands. Nonetheless, the proposed project would be constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. These building codes

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are designed to ensure safe construction. As such, impacts associated with onor off-site landslides, lateral spreading, subsidence, and collapses would be less than significant.

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
 - Reference: Geotechnical Engineering Report Rancho Cienega Sports Complex, May 2015 (Appendix D)
 - Comment: A significant impact would occur if the proposed project were built on expansive soils without proper site preparation or design features to provide adequate foundations for project buildings, thus posing a risk to life and property.

Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away. If soils consist of expansive clays, foundation movement and/or damage can occur if wetting and drying of the clay does not occur uniformly across the entire area.

The geotechnical investigation conducted for the proposed project included expansion index testing. The results indicated that the near surface soil (upper 5 feet) has a medium expansion potential. However, the proposed project would be constructed in accordance with the latest version of the *City of Los Angeles Building Code* and other applicable federal, state, and local codes relative to seismic criteria. As such, the proposed project would not create a substantial risk to life or property resulting from expansive soils. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Reference: L.A. CEQA Thresholds Guide

Comment: A significant impact would occur if the proposed project were built on soils that were incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system, and such a system were proposed.

Construction and operation of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact associated with the use of such systems would occur.

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7. GREENHOUSE GAS EMISSIONS – Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
 - Reference: SCAQMD. Draft Guidance Document Interim CEQA Greenhouse Gas Significance Threshold, October 2008; Rancho Cienega Sports Complex Project Air Quality and Greenhouse Gas Analysis, 2015 (Appendix A)
 - Comment: A significant impact may occur if the proposed project would generate greenhouse gas (GHG) emissions that would have a significant impact on the environment.

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHG), play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the earth's atmosphere; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Without the naturally occurring greenhouse effect, Earth would not be able to support life as we know it.

GHGs are present in the atmosphere naturally, are released by natural and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals and plants, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels, waste treatment, and agricultural processes.

Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the GHGs that that are widely accepted as the principal contributors to human-induced global climate change and would be generated by the proposed project. The majority of CO₂ emissions are byproducts of fossil fuel combustion. CH₄ is the main component of natural gas and is associated with agricultural practices and landfills. N₂O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO2. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb

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infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2 , the most abundant GHG. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). The concept of CO_2 -equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Total construction-related GHG emissions were estimated using the same methodology to estimate criteria pollutant emissions discussed earlier. As shown in Table 5, total project construction emissions would be approximately 1,128 metric tons (MT) of CO₂e. SCAQMD recommends that construction emissions be amortized over 30 years, which is assumed to be the average lifetime of a project's operations, and added to the operational emissions of the project. When this total is amortized over the 30-year life of the project, annual construction emissions would be approximately 38 MT CO₂e per year.

The SCAQMD has only adopted a significance threshold of 10,000 MT of CO₂ per year for industrial projects (SCAQMD 2008). The GHG CEQA Significance Threshold Stakeholder Working Group recommended options for evaluating non-industrial projects including thresholds for residential, commercial, and mixed use projects (SCAQMD 2009). The draft thresholds released by the SCAQMD include a threshold of 3,000 MT CO₂e per year for all of those lands use types. At the time of this analysis, these draft thresholds have not been adopted by the SCAQMD. Since the proposed project would include commercial and recreational land uses, the proposed SCAQMD threshold of 3,000 MT CO₂e per year will be used for this analysis. Table 5 summarizes the proposed operational emissions and amortized construction GHG emissions.

As shown in Table 5, the project-related GHG emissions are below the SCAQMD proposed threshold. Therefore, the impact would be less than significant.

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Year	Total
2016	131
2017	422
2018	575
Total	1,128
Amortized Construction Emissions	38

Table 5
Construction-Related GHG Emissions (MT CO ₂ e/year)

 $MT CO_2e =$ metric tons of carbon dioxide equivalent Additional details available in Attachment A. Source: Modeled by AECOM in 2015

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- b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?
 - Reference: California Air Resources Board, *The California Global Warming* Solutions Act of 2006 (AB32), 2006; City of Los Angeles, Green LA -- An Action Plan to Lead the Nation in Fighting Global Warming, 2007; City of Los Angeles, Climate LA – Municipal Program Implementing the Green LA Climate Action Plan, 2008; Rancho Cienega Sports Complex Project Air Quality and Greenhouse Gas Analysis, 2015 (Appendix A)
 - Comment: A significant impact may occur if the proposed project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, requires that statewide GHG emissions be reduced to 1990 levels by 2020. ARB's *Scoping Plan* is the state's plan to achieve the GHG reductions in California required by AB 32 and also reiterates the state's role in the long-term goal established in Executive Order S-3-05, which is to reduce GHG emissions to 80% below 1990 levels by 2050.

ARB is required to update the *Scoping Plan* at least once every five years to evaluate progress and develop future inventories that may guide this process. ARB approved the first update to the *Climate Change Scoping Plan: Building on the Framework* in 2014 (ARB 2014). The Scoping Plan update confirms that the state is on track to meet the 2020 emissions reduction target, but will need to maintain and build upon its existing programs, scale up deployment of clean technologies, and provide more low-carbon options to accelerate GHG emission reductions, especially after 2020, in order to meet the 2050 target. The Scoping Plan update did not directly create any regulatory requirements for construction of the proposed project. However, the Scoping Plan update includes recommended actions (e.g., Phase 2 heavy-duty truck GHG standard standards, enhance and strengthen the Low Carbon Fuel Standard) that would indirectly address GHG emissions from construction activities.

In May 2007, the City of Los Angeles released its Climate Action Plan (CAP), *"Green LA: An Action Plan to Lead the Nation in Fighting Global Warming."* The Plan sets forth a goal of reducing the City's greenhouse gas emissions to 35% below 1990 levels by the year 2030. The CAP is a voluntary plan that identifies over 50 action items, grouped into focus areas, to reduce emissions. ClimateLA is the implementation program that provides detailed information, including a context, lead departments, and a timeline for completion, for each action item

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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discussed in the GreenLA CAP. Where possible, the ClimateLA program document includes potential CO2 emission reductions from full implementation of the measures.

The proposed project would be a reconstruction of existing land uses, and building construction activities would be consistent with current Title 24 standards, which would improve energy efficiency of the buildings. Therefore, the proposed project would not conflict with the AB 32 *Scoping Plan, GreenLA CAP*, or *ClimateLA*. As discussed earlier, the proposed project would also not generate GHG emissions that would have a significant impact on the environment. Therefore, the proposed project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. The impact would be less than significant.

8. HAZARDS AND HAZARDOUS MATERIALS – Would the

project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?



Reference: L.A. CEQA Thresholds Guide (Sections F.1 & F.2)

Comment: A significant impact would occur if the proposed project utilized substantial amounts of hazardous materials as part of its routine operations and could potentially pose a hazard to the public under accident or upset conditions.

Implementation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be temporary in nature and would involve the limited transport, storage, use, and disposal of hazardous materials. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, United States Environmental Protection Agency, the Occupational Safety & Health Administration, the City of Los Angeles Fire Department, and the Los Angeles County Department of Public Health. The transport, use, and disposal of construction-related hazardous materials would occur in accordance with applicable federal, State, and local regulations governing such activities. Therefore, the short-term construction impact would be less than significant.

Long-term operation of the proposed project would involve the continued limited

transport, storage, use, and disposal of hazardous materials related to pool maintenance and operation. These materials (chlorine, bromine, sodium carbonate, etc.) are currently used and stored on the project site to operate and maintain the existing Celes King III Indoor Pool and are common chemicals used to maintain pools. All hazardous materials transported, stored, used, and disposed of for the purpose of maintaining the new indoor pool would continue to be in compliance with federal and State regulations. In addition, the County of Los Angeles Department of Public Health, Bureau of Environmental Protection, Recreational Waters Program, is responsible for enforcing laws and regulations related to the safe maintenance of the 3,200 public pools in Los Angeles County. Additionally, the proposed project would not generate industrial wastes or toxic substances during operation. Therefore, project operation would not pose a significant hazard to the public or the environment. No operational impact related to hazardous materials would occur.

b) 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?



Reference: L.A. CEQA Thresholds Guide (Sections F.1 & F.2)

Comment: Refer to Section 8 (a) above.

Asbestos-containing materials (ACMs) are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. When left intact and undisturbed, these materials do not pose a health risk to building occupants. There is, however, potential for exposure when ACMs become damaged to the extent that asbestos fibers become airborne and are inhaled. These airborne fibers are carcinogenic and can cause lung disease. The age of a building is directly related to its potential for containing elevated levels of ACMs. Asbestos was utilized routinely in many building materials until 1978.

Lead-based paint (LBP), which can result in lead poisoning when consumed or inhaled, was widely used in the past to coat and decorate buildings. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACMs, LBP generally does not pose a health risk to building occupants when left undisturbed; however, deterioration, damage, or disturbance could result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, structures built before 1978 are likely to contain LBP, as well as those built shortly thereafter, as the phase-out of LBP was gradual. Construction of the

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existing sports complex began in 1936, which included the construction of tennis courts, baseball diamonds and bleachers, a maintenance building, children's play area, volleyball, basketball, and croquet courts, and parking areas. The restroom facility was constructed in 1964, the gymnasium was constructed in 1980, and the daycare center was constructed in 2002.

Due to the age of the on-site structures to be demolished, it is possible that these structures may contain ACMs and LBP. As such, Mitigation Measures HAZ-1 and HAZ-2 would be implemented to ensure the safe removal of any identified ACMs or LBP. With implementation of Mitigation Measures HAZ-1 and HAZ-2, impacts of accident conditions involving the release of hazardous materials into the environment would be less than significant.

Mitigation Measures HAZ-1 and HAZ-2 are required as follows:

<u>Mitigation Measure HAZ-1</u>: Prior to demolition of existing structures, a demolition-level asbestos survey shall be conducted at the project site to identify ACMs. If ACMs are detected, a licensed asbestos abatement contractor shall be retained to remove all ACMs and abate the buildings in compliance with the South Coast Air Quality Management District's Rule 1403, as well as all other state and federal rules and regulations.

<u>Mitigation Measure HAZ-2:</u> Prior to demolition of the existing structures, an LBP survey shall be conducted at the project site. The survey shall include the sampling of paint in various representative areas. The samples shall consist of paint chips physically removed from the walls and analyzed for lead. If LBP is detected, a licensed LBP abatement contractor shall be retained to remove all LBP and abate the buildings in compliance with all applicable local, state, and federal regulations.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?



Reference: L.A. CEQA Thresholds Guide (Section F.2); ZIMAS

Comment: A significant impact would occur if the proposed project were located within one-quarter mile of an existing or proposed school site and were projected to release toxic emissions which would pose a hazard beyond regulatory thresholds.
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There are two schools located within a 0.25-mile radius of the project site and within 0.25-mile of the facilities to be demolished and constructed: Dorsey High School, located directly east of the project site at 3537 Farmdale Road, and View Park Continuation High School, also located directly east of the project site at 4701 Rodeo Road. In addition, as previously discussed, a child care facility, the Ira C. Massey Child Care Center, is located on the project site.

As discussed in Section 8 (a) above, construction activities would involve limited transport, storage, usage, and disposal of hazardous materials. However, these materials are not acutely hazardous and the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable federal, state, and local regulations governing such activities. Therefore, impacts related to hazardous materials within one-quarter mile of an existing or proposed school would be less than significant.

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



Reference: L.A. CEQA Thresholds Guide (Section F.2); EnviroStor; GeoTracker

Comment: A significant impact would occur if the proposed project were 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, created a significant hazard to the public or the environment.

The project site is not listed in the State Water Resources Control Board GeoTracker system which includes leaking underground fuel tank sites and spills, leaks, investigations, and cleanups sites; or the Department of Toxic Substances Control EnviroStor Data Management System which includes CORTESE sites, or the Environmental Protection Agency's database of regulated facilities. Although no hazardous materials sites exist on the project site, several leaking underground storage tank cleanup sites exist in the project vicinity. In addition, two school investigation sites and one school cleanup site exist adjacent to the project site. The New Rodeo Road Middle School investigation site is located west of the project site (5051 Rodeo Road) and is listed due to the possibilities of contaminants in the soil due the former possible use of the facility as a laboratory during the 1950s through the 1990s. The Central Region High School #14 investigation site is located east of the project site within the boundary of the existing Dorsey High School (3537 Farmdale Avenue) and is listed due to lead-based paint, asbestos and organochlorine

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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pesticides that may have impacted the site. The school cleanup site is also located at Dorsey High School (3537 Farmdale Avenue), and is listed due to the possibilities of contaminants in lead-based paint, OCPs from termiticides, total petroleum hydrocarbons, volatile organic compounds, polycyclic aromatic hydrocarbons, arsenic, polychlorinated biphenyls, dioxins, and furans. Approximately 74 cubic yards of chlordane and TPH-contaminated soil was excavated from the site and the cleanup was certified as completed and approved by DTSC on October 19, 2011.

While unlikely, should contaminated soils be encountered during construction of the proposed project, excavated material (e.g., soil, slurry, and groundwater) would be monitored and tested prior to disposal. Excavated material that is deemed hazardous would be subject to strict federal, state, and local regulations for its handling, transport, and disposal. These activities would occur under the oversight of the DTSC, SWRCB, and LAFD. Adherence to federal, state, and local standards would minimize the risk to the public or the environment. Therefore, the impact would be less than significant.

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



Reference: General Plan, L.A. CEQA Thresholds Guide (Section F.1); LACDRP Airport Land Use Commission Airports - Los Angeles County

Comment: A significant impact would occur if the project site were located within a public airport land use plan area, or within two miles of a public airport, and created a safety hazard.

The project site is not located within an airport land use plan, or within two miles of a public airport of public use airport. The project site is located approximately 5.3 miles east of the Santa Monica Municipal Airport and 5.6 miles northeast of the Los Angeles International Airport. Therefore, no safety hazard associated with proximity to an airport is anticipated for the proposed project. No impact would occur.

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f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing working in the project area?	d or 🗌 🗌 🖾
Reference: L.A. CEQA Thresholds Guide (Section F.1));
Comment: A significant impact would occur if the proper vicinity of a private airstrip and resulted in a safety has working in the project area.	osed project were in the azard for people residing or
The project site is not located within the vicinity of a safety hazard from proximity to a private airport or ai proposed project. No impact would occur.	private airstrip. Therefore, no rstrip is anticipated from the
 g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Reference: L.A. CEQA Thresholds Guide (Section F.1) General Plan); City of Los Angeles
Comment: A significant impact would occur if the proper interfered with roadway operations used in conjunction response plan or evacuation plan or generated suffic congestion that would interfere with the execution of	osed project substantially on with an emergency cient traffic to create traffic these plans.
During construction activities, vehicles and equipment the entrance off Rodeo Road or via the rear entrance road or lane closures are anticipated during construc- construction, ingress and egress to the site and surre particularly for emergency response vehicles, would addition, operation would not permanently alter the a Therefore, construction and operation of the propose interfere with implementation of an adopted emerger emergency evacuation plan. The impact would be le	nt would access the site via e off Exposition Road. No ction activities. During ounding properties, be maintained at all times. In adjacent street system. ed project would not impair or ncy response plan or ss than significant.
h) 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?	
Reference: L.A. CEQA Thresholds Guide (Section F.1) General Plan Safety Element Exhibit D); City of Los Angeles
Comment: A significant impact would occur if the proper a wildland area and poses a significant fire hazard, w	osed project were located in which could affect persons or

structures in the area in the event of a fire.

The project site is not located within a designated High Fire Hazard Severity Zone according to the *City of Los Angeles General Plan*. The project site and surrounding areas are completely developed and there are no wildlands adjacent to the site. Therefore, no impact related to wildland fires would occur.

9. HYDROLOGY AND WATER QUALITY – Would the project:

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



Reference: L.A. CEQA Thresholds Guide (Section G.2)

Comment: A significant impact would occur if the proposed project discharged water which did not meet the quality standards of agencies which regulate surface water quality and water discharge into stormwater drainage systems such as the LARWQCB. These regulations include compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

The proposed project would not violate a water quality standard or waste discharge requirement. Construction activities, such as grading and excavation, would result in the disturbance of soil and temporarily increase the potential for soil erosion. Additionally, construction activities and equipment would require the on-site use and storage of fuels, lubricants, and other hydrocarbon fluids. Storm events occurring during the construction phase would have the potential to carry disturbed sediments and spilled substances from construction activities off-site to nearby receiving waters.

For implementation of the proposed project, prior to the start of construction, BOE would be required to obtain a General Construction Activity Stormwater Permit, issued by the State Water Resources Control Board. One of the conditions of the General Permit is the development and the implementation of a SWPPP, which would identify structural and nonstructural BMPs to be implemented during the construction phase. As discussed in Section II Subsection G, BOE would also develop and implement an erosion control plan for the proposed project. BMPs developed for the SWPPP and the erosion control plan may include, but not be limited to, minimizing the extent of disturbed areas and duration of exposure; stabilizing and protecting disturbed areas; keeping runoff velocities low; retaining sediment within the construction area; and the use of temporary desilting basins, silt fences, gravel bag barriers, temporary soil stabilization, temporary drainage inlet protection, and diversion dikes and interceptor swales. With implementation of BMPs, the proposed project would not

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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violate any water quality standards or waste discharge requirements. Therefore, impacts on water quality from construction activities would be less than significant.

In addition, the proposed project includes the installation of stormwater and drainage infrastructure throughout the complex. Upon completion of the proposed project, storm flows would be directed to the existing municipal storm drain system. There would be no exposed soil remaining at the completion of rehabilitation activities; therefore, there would be no potential for soil erosion or contamination. No long-term impact to water quality would occur during project operations.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?



- Reference: L.A. CEQA Thresholds Guide (Sections G.2 and G.3); Geotechnical Engineering Report Rancho Cienega Sports Complex, May 2015 (Appendix D); Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle
- Comment: A project would have a significant impact on groundwater supplies if it resulted in a demonstrable and sustained reduction of groundwater recharge capacity or changed the potable water levels sufficiently that it would reduce the ability of a water utility to use the groundwater basin for public water supplies or storage of imported water, reduced the yields of adjacent wells or well fields, or adversely changed the rate or direction of groundwater flow.

The Division of Mines and Geology identified historically shallow groundwater in the western and southwestern parts of the Hollywood Quadrangle, which encompasses the project site. According to the *Hollywood Quadrangle Seismic Hazard Report*, the groundwater depth in the project area is as low as 10 feet below ground surface (bgs). Additionally, the geotechnical investigation completed for the proposed project encountered groundwater in five of the twelve borings ranging from approximately 5 to 37.5 feet bgs. However, it was determined that the groundwater likely did not have enough time to stabilize in the boreholes. Therefore, three additional borings were drilled to a depth of approximately 25 feet bgs and left for several days. Following stabilization, the depth of the groundwater ranged from approximately 6.5 to 10 feet bgs. The report also noted that the shallowest groundwater was encountered on the east

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side of the proposed complex, adjacent to the existing tennis courts and in the areas of the existing child care center. As part of the proposed project, no work would occur at the child care center.

As discussed in the *Geotechnical Engineering Report*, it should be expected that groundwater would be encountered for excavations extending deeper than 6.5 feet bgs. Construction of the proposed project would excavate to approximately 35 feet deep when foundation piles are installed within the indoor pool and indoor gymnasium footprints. However, construction activity that has the potential to encounter groundwater would be required to comply with the recommendations set forth in the *Geotechnical Engineering Report*, such as proper disposal of displaced groundwater and dewatering during construction of the pool. Implementation of Mitigation Measures GEO-1 and GEO-2 would reduce impacts related to groundwater during construction to less than significant.

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

Reference: L.A. CEQA Thresholds Guide (Sections G.1 and G2)

Comment: A significant impact would occur if the proposed project resulted in a substantial alteration of drainage patterns that resulted in a substantial increase in erosion or siltation during construction or operation of the project.

Following construction, the new sports complex would generally occupy the same footprint as existing conditions. Several of the larger facilities within the park are to remain, such as the Jackie Robinson Stadium and Dodger Dreamfield as well as the soccer field, basketball courts, and tennis courts. As such, the proposed project would not substantially alter the existing drainage pattern of the project site or surrounding area. As previously discussed, the proposed project would implement BMPs that would minimize short-term construction impacts of erosion. Therefore, the proposed project would not result in substantial erosion from altered drainage patterns and the impact would be less than significant.

Additionally, construction of the proposed project would result in demolition and ground surface disruption activities, such as site grading and excavation that would leave the site as stabilized pervious surface. However, soil exposure would be temporary and short-term in nature and applicable Department of Building and Safety erosion control techniques would limit potential erosion. In addition, the proposed project includes the installation of stormwater and drainage infrastructure throughout the park, which may alter the existing drainage pattern of the project site. However, the proposed stormwater and drainage

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Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant

infrastructure would improve the drainage pattern of runoff and stormwater from the project site to the existing municipal storm infrastructure in the project area. Therefore construction and operation of the proposed project would not result in substantial erosion or siltation off-site. Impacts would be less than significant.

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



Reference: L.A. CEQA Thresholds Guide (Section G.1)

Comment: A significant impact would occur if the proposed project resulted in increased runoff volumes during construction or operation of the proposed project that would result in flooding conditions affecting the project site or nearby properties.

As discussed in Section 9 (a), following construction, the new sports complex would generally occupy the same footprint as existing conditions. Additionally, the proposed project would not result in a substantial increase of impervious surfaces at the project site as facilities within the park are to be demolished and constructed elsewhere on the site. The proposed project also includes the installation of stormwater and drainage infrastructure throughout the park and the installation of permeable pavers and vegetation swales. Therefore, implementation of the proposed project would not substantially alter and would serve to improve the existing drainage pattern such that flooding would not occur. The impact would be less than significant.

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

Reference: L.A. CEQA Thresholds Guide (Section G.2)

Comment: A significant impact would occur if the volume of runoff increased to a level, which exceeded the capacity of the storm drain system serving a project site. A significant impact would also occur if the proposed project substantially increased the probability that polluted runoff would reach the storm drain system.

As discussed in Section 9 (a), following construction, the new sports complex would generally occupy the same footprint as existing conditions. In addition, the proposed project would not result in a substantial increase of impervious surfaces at the project site as facilities within the park are to be demolished and

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constructed elsewhere on the site. The majority of the proposed off-street parking would occur in areas that are currently paved with impervious surfaces. Additionally, the proposed project involves the installation of permeable pavers and vegetation swales, which currently do not exist on-site. Furthermore, the proposed project includes stormwater and drainage infrastructure that would serve to improve the drainage pattern of the project site. Therefore, the proposed project would not contribute runoff water exceeding the capacity of stormwater drainage systems. As discussed, BMPs would be implemented to control runoff from the project site during the construction phase. The impact would be less than significant.

f) Otherwise substantially degrade water quality?

Reference: Refer to Section 9 (a) above.

- Comment: Other than the construction sources of pollutants described previously (i.e., fuels from construction equipment, etc.), the proposed project would not include other potential sources of contaminants that could degrade water quality. Additionally, as discussed in Section II Subsection G, BMPs would be implemented to control runoff from the project site during construction to prevent the degradation of water quality. Therefore, impacts to water quality would be less than significant.
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

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- Reference: L.A. CEQA Thresholds Guide (Sections G.1 to G.3); City of Los Angeles General Plan Safety Element; FEMA Flood Insurance Rate Map Number 06037C1615F
- Comment: A significant impact would occur if the proposed project placed housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

No 100-year flood zones coincide with the project site. However, according to Flood Insurance Rate Map Number 06037C1615F, the entire project site is located within an area designated as Zone X, which is categorized as an area that is within a 500-year flood zone. Notwithstanding, the proposed project does

not include a residential component. Therefore, the proposed project would not place housing within a 100-year flood zone, and no impact would occur.

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h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?			\boxtimes	
Reference: L.A. CEQA Thresholds Guide (Sections G.1 & Insurance Rate Map Number 06037C1615F	G.3); FE	EMA Flo	od	
Comment: A significant impact would occur if the proposed 100-year flood hazard area structures that would imped	d project e or redi	placed	within od flow	a s.
As noted in Section 9 (g) above, the project site is locate hazard area. The proposed project includes the installat drainage infrastructure throughout the park, which would drainage pattern of runoff and stormwater from the project municipal stormwater infrastructure in the project area. than significant.	ed withir tion of st d serve t ect site t The imp	n a 500- cormwat to impro o the ex act wou	year fl er and ove the disting d be lo	ood ess
 i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? 			\boxtimes	
Reference: L.A. CEQA Thresholds Guide (Sections E.1 & General Plan Safety Element	G.3); C	ity of Lo	os Ange	eles
Comment: A significant impact would occur if the propose an area where a dam or levee could fail, exposing peop significant risk of loss, injury or death.	d projec le or stri	t were l uctures	ocated to	in
According to the <i>City of Los Angeles General Plan Safe</i> site is located within the potential inundation area of the the Silver Lake Reservoir. The inundation area is based catastrophic failure of dams during peak storage capaci boundary shown on the map encompasses all probable follow after exiting a dam; thus, the map shows a very la inundation area. However, all dams are continually mon governmental agencies (such as the State of California Dams and the U.S. Army Corps of Engineers) to guard a failure. Catastrophic failure of a major dam as a result o regarded as unlikely. Current design and construction p review modification, and dam reconstruction programs	ty Eleme Hollywo on an a ty. The i routes t arge and itored by Division against f an ear ractices are inter	ent, the bod Res assumed nundati hat a flo that a flo to safe to safe the thre and on oded to	projec ervoir d on cod mig vative s ty of at of da e is going ensure	t and ght am

that all dams are capable of withstanding the maximum magnitude earthquake for the site. Therefore, the potential for the project site to be inundated as a result of a dam failure, and potential exposure of people and structures to flooding due to dam failure, is low. Impacts would be less than significant.

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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Additionally, construction and operation of any below or above ground elements would be in accordance with building and seismic code requirements. No new structures would be constructed on the site that would be vulnerable to flooding or inundation in the event of a dam break and would not impede or redirect flood flows in the project area. No housing would be constructed on the site that would expose people to flooding. In the event of an emergency, the City has adopted emergency evacuation procedures that would be implemented in the case of a dam break. Therefore, the proposed project would not result in exposure of people or structures to significant risk of loss, injury or death related to flooding or dam inundation. Therefore, the potential impact of the proposed project from being within an inundation area of a dam or levee is less than significant.

j) Inundation by seiche, tsunami, or mudflow?



- Reference: L.A. CEQA Thresholds Guide (Section E.1); City of Los Angeles General Plan Safety Element; Department of Conservation Tsunami Inundation Maps
- Comment: A significant impact would occur if the proposed project caused or accelerated geologic hazards, which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. The project site is not located near an enclosed large body of water that could experience seiches during an earthquake. Thus, no impact would occur.

Tsunamis are tidal waves generated in large bodies of water caused by fault displacement or major ground movement. Hazardous tsunamis, which are rare along the Los Angeles coastline, have the potential to cause flooding in the low-lying coastal area. The project site is located approximately 7.2 miles from the Pacific Ocean and is not located within a tsunami hazard area. Therefore, no impact would occur.

As discussed in Section 6 (a)(iv), the project site is not located within a Citydesignated hillside area and would not be subject to a landslide. Therefore, no impact associated with inundation from mudflow would occur. 10. LAND USE

Issues	Potentially Significant Impact	Less Than Significant With	Mitigation Less Than Significant	No Impact
AND USE AND PLANNING – Would the project:				
a) Physically divide an established community?				\square

Reference: L.A. CEQA Thresholds Guide (Section H.2); City of Los Angeles General Plan; West Adams-Baldwin Hills-Leimert Community Plan

Comment: A significant impact would occur if the project included features such as a highway, above-ground infrastructure, or an easement that would cause a permanent disruption to an established community or would otherwise create a physical barrier within an established community.

The proposed project is located entirely within the existing Rancho Cienega Sports Complex in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. Neither construction nor operation of the proposed project would include features such as a highway, above-ground infrastructure, or an easement that would cause a permanent disruption to an established community or would otherwise create a physical barrier within an established community. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

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

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Reference: L.A. CEQA Thresholds Guide (Sections H.1 & H.2); City of Los Angeles General Plan; ZIMAS; West Adams-Baldwin Hills-Leimert Community Plan

Comment: A significant impact would occur if the proposed project were inconsistent with the General Plan, or other applicable plan, or with the site's zoning if designated to avoid or mitigate a significant potential environmental impact.

The project site is located entirely within the City of Los Angeles in the West Adams-Baldwin Hills-Leimert Community Plan Area. The West Adams-Baldwin Hills-Leimert Community Plan is one of 35 community plans that comprise the land use element of the City of Los Angeles General Plan. The community plan establishes the goals, objectives, policies, and programs applicable to the West Adams-Baldwin Hills-Leimert Community Plan Area.

The City's current zoning designation for the project site is OS-1XL (Open Space). The site is designated as Open Space by the General Plan. No new land

Issues	Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant No Impact

uses would be introduced at the project site and the facilities would continue to be operated by RAP. Therefore, the proposed project would not conflict with the existing zoning or General Plan designations for the project site. No impact would occur.

The proposed project is also consistent with the goals and policies set forth in the City's community plan. The *West Adams-Baldwin Hills-Leimert Community Plan* advocates the development of parks in the community. Policy 1-1.1 encourages the preservation of existing recreation facilities and park space. The plan also supports accommodation of active parkland (Policy 2-1.2). As such, the proposed project would be consistent with land use plans and policies contained in the *West Adams-Baldwin Hills-Leimert Community Plan*. Accordingly, no impacts to applicable land use plans would occur.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?
 - Reference: L.A. CEQA Thresholds Guide (Sections H.1 & H.2); City of Los Angeles General Plan
 - Comment: A significant impact would occur if the proposed project were located within an area governed by a habitat conservation plan or natural community conservation plan and conflicted with such plan.

As previously discussed in Section 4 (d), the project site is not located in a habitat conservation plan or a natural community conservation plan. As such, the proposed project would not conflict with the provisions of an approved conservation plan, and no impact would occur.

11. MINERAL RESOURCES – Would the project:

a) 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?



- Reference: *L.A. CEQA Thresholds Guide (Section E4); City of Los Angeles General Plan;* California Geological Survey Aggregate Sustainability in California, 2012; California Department of Conservation Division of Oil, Gas, & Geothermal Resources Well Finder.
- Comment: A significant impact would occur if the proposed project were located in an area used or available for extraction of a regionally important mineral resource, if the project converted a regionally important mineral extraction use to another use, or if the project affected access to such use.

Issues	Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant No Impact

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No mineral resources are identified within the project site. The nearest oil well is located 0.6-mile west of the project site and is identified as plugged and no longer active. Therefore, the proposed project is not anticipated to result in the loss of availability of a valuable known mineral resource and no impact is anticipated.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?		\boxtimes
Reference: Refer to Section 11 (a) above.		
Comment: Refer to Section 11 (a) above.		
12. NOISE – Would the project result in:		
a) European of a superior to an analysis of a size local size		

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
 - Reference: City of Los Angeles Municipal Code (Chapter IV, Article 1, Section 41.40; Section 112.05 of Chapter IX, Article 2); L.A. CEQA Thresholds Guide (Section I); Noise and Vibration Impact Study, Terry A. Hayes Associates, 2015 (Appendix E)
 - Comment: A significant impact would occur if the proposed project exposed persons to or generated noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The City of Los Angeles has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited) of the LAMC indicates that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m., since such activities would generate loud noises and disturb persons occupying sleeping quarters in any adjacent dwelling, hotel, apartment or other place of residence. No person, other than an individual homeowner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind or perform such work within 500 feet of land so occupied before 8:00 a.m. or after 6:00 p.m. on any Saturday or on a federal holiday, or at any time on any Sunday. Under certain conditions, the City may grant a waiver to allow limited construction activities to occur outside of the limits described above.

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Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) of the LAMC also specifies the maximum noise level for powered equipment and powered hand tools. Any powered equipment or hand tool that produces a maximum noise level exceeding 75 A-weighted decibels (dBA) at a distance of 50 feet is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

Existing Noise Levels

Sensitive receptors are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. They typically include residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas. The project site is located in an urban environment and many sensitive receptors are located near the construction zone. Sensitive receptors within the vicinity of the proposed project site include Dorsey High School adjacent and to the east, residences directly to the south across Rodeo Road, and residences to the west across La Brea Avenue. The project site also includes a childcare facility, which is open from 3:00 p.m. to the evening.

To characterize the existing noise environment around the project site, ambient noise was monitored using a SoundPro DL Sound Level Meter on October 1, 2015, between 11:00 a.m. and 12:30 p.m. The detailed locations are shown in Appendix E. Measurements were taken for 15-minute periods at each site. As shown in Table 6, the existing ambient sound levels range between 57.4 and 72.0 dBA L_{eq} . Traffic was the primary source of noise at each site. Possible sources of vibration at the project site include the Metro Expo Line and truck traffic. Based on field visits, neither source generates perceptible vibration on the project site.

Construction Noise

Construction activity is anticipated to begin in December 2016 and take approximately 27 months to complete, concluding in March 2019. It is estimated that approximately 42 construction personnel would be on-site per day during Phase 1 and approximately 29 during Phase 2. LAMC allows construction activity to occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. Construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays and

federal holidays. There would be no construction activities on Sundays, and no construction would occur during prohibited hours.

Table 6Existing Noise Levels

Noise Monitoring Location	Sound Level (dBA, L _{eq})
Residences at 3515 South La Brea Avenue	72.0
Rancho Cienega Sports Complex Childcare Center	57.4
Dorsey High School	66.8

Source: Terry A. Hayes Associates 2015

<u>Equipment:</u> Typical noise levels from various types of equipment that may be used during construction are listed in Table 7. The table shows noise levels at distances of 50 feet from the construction noise source. Construction activities typically require the use of numerous pieces of noise-generating equipment. The noise levels shown in Table 8 take into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, project-related activity (i.e., ground clearing and site preparation) would generate noise levels between 84 and 89 dBA Leq at 50 feet.

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Construction Equipment	Noise Level at 50 feet (dBA, L _{eq})
Backhoe (Skid Loader/Skip Loader)	73.6
Compactor	76.2
Concrete Mixer Truck	74.8
Concrete Pump Truck	74.4
Crane	72.6
Dump Truck	72.5
Excavator	76.7
Pile Driver	94.3
Roller	73.0

Table 7Construction Equipment Noise Level Ranges

Source: FHWA, Roadway Construction Noise Model, Version 1.1, 2008.

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Table 8
Typical Outdoor Construction Noise Levels

Construction Method	Noise Level at 50 feet (dBA, Leq)
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89

Source: USEPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971.

A pile driver would be used for the installation of piles for the foundation of the building. Piles would be installed within the building footprint to an approximate depth of 35 feet. Pile driving would generate the highest noise levels of any construction equipment with a noise level of 94.3 dBA at 50 feet. Pile driving activity would be limited to the initial stages of Phase 1.

The impact analysis is based on the construction limits in the LAMC. Construction activity would comply with the allowable hours of construction in the LAMC, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays. The LAMC limits equipment noise levels to 75 dBA at 50 feet unless technically infeasible. Noise levels from individual pieces of equipment would typically range from 72.5 to 94.3 dBA Leq at 50 feet. Unmitigated noise levels would typically exceed the allowable noise level stated in the LAMC. Therefore, without mitigation, the proposed project would result in a significant impact related to construction noise.

<u>*Trucks:*</u> In addition to on-site demolition/construction activities, noise would be generated off-site by construction-related trucks. A maximum of four daily truck trips would occur during the peak period of demolition/construction. A doubling of traffic volume is typically needed to audibly increase noise levels along a roadway segment. An additional four trucks per day would not double the volume on any roadway segment. It is not anticipated that off-site vehicle activity would audibly change average daily noise levels. Therefore, the impacts related to construction-related off-site noise would be less than significant.

Mitigation Measures NOI-1 through NOI-9 are required as follows:

<u>Mitigation Measure NOI-1</u>: Construction equipment shall be properly maintained and equipped with mufflers.

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<u>Mitigation Measure NOI-2</u>: The pile driver points of impact shall be equipped with a sound apron made of sound absorptive material or dampeners. As discussed in the *Federal Highway Administration Construction Noise Handbook*, sound aprons consist of sound absorptive mats hung from construction equipment or on frames attached to equipment.

<u>Mitigation Measure NOI-3:</u> Construction equipment shall have rubber tires instead of tracks.

<u>Mitigation Measure NOI-4</u>: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

<u>Mitigation Measure NOI-5:</u> A public liaison shall be appointed for project construction and shall be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.

<u>Mitigation Measure NOI-6</u>: The construction manager shall coordinate with the site administrator for Dorsey High School to schedule construction activity such that student exposure to noise is minimized.

<u>Mitigation Measure NOI-7</u>: Pile driving activity shall be limited to between 9:00 a.m. and 3:00 p.m.

<u>Mitigation Measure NOI-8</u>: The public shall be notified in advance of the location and dates of construction hours and activities.

<u>Mitigation Measure NOI-9</u>: As mandated in the *Los Angeles Municipal Code Section 41.40*, construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to increased nighttime noise levels.

Additional mitigation measures were considered to reduce noise levels but were determined to be infeasible. These include:

• Electric Equipment - Electric equipment would generate less noise than diesel equipment but is not widely available and the horsepower associated with electric equipment would not meet project requirements.

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- Relocation Removing the affected land uses from the construction zone would eliminate the impact. This measure would not be feasible due to the associated cost of relocation.
- Window Retrofits Retrofitting windows at affected land uses would reduce noise exposure. This measure would not be feasible due to the number of affected land uses and associated cost of retrofitting considering the temporary nature of the noise from construction.

Mitigation Measures NOI-1 through NOI-9 are feasible measures to control noise levels, including engine mufflers. With implementation of these feasible mitigation measures, and based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible. Therefore, the proposed project would result in a less than significant impact related to construction noise.

Operational Noise

Typical sources of noise for new projects include increased traffic, mechanical equipment, and parking lots. The proposed project would not generate new traffic and there would be no increase in local traffic noise. In addition, activity associated with the proposed land uses would be inside the buildings, and would not include significant sources of stationary noise.

Additional parking areas would be constructed under the proposed project. New off-street parking would be located on the northwest portion of the project site along Exposition Boulevard. Automobile movements would generate a noise level of approximately 58.1 dBA Leq at a distance of 50 feet. The nearest land use would be residences located approximately 600 feet to the west along La Brea Avenue. The existing noise level is approximately 72.0 dBA Leq and the parking noise exposure would be 36.5 dBA Leq. The increase in noise from this parking lot would be less than 1 dBA and would not be audible at any sensitive receptor.

The primary parking lot along Rodeo Road would be refurbished as part of the proposed project and would continue to serve as the primary parking area for the sports complex. Vehicles could also enter the new off-street parking area located to the east of Jackie Robinson Stadium. The nearest land use would be residences located approximately 100 feet to the south across Rodeo Road. The existing noise level is approximately 66.8 dBA Leq and the parking noise exposure would be 52.0 dBA Leq. The increase in noise from these parking areas would be less than 1 dBA and would not be audible at any sensitive

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receptor. Therefore, the proposed project would result in a less than significant impact related to parking noise.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?



- Reference: L.A. CEQA Thresholds Guide (Section I); City of Los Angeles General Plan, City of Los Angeles Municipal Code; Noise and Vibration Impact Study, Terry A. Hayes Associates, 2015 (Appendix E)
- Comment: A significant impact would occur if the project exposed persons to or generated excessive groundborne vibration or groundborne noise levels.

Vibration levels rarely affect human health, although high levels of vibration may damage buildings. The peak particle velocity is most frequently used to describe vibration impacts to buildings and is measured in inches per second.

Heavy trucks can generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on major streets, existing ground-borne vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network. Based on field visits, vibration levels from adjacent roadways are not perceptible along the proposed project.

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

<u>On-Site Equipment</u>: The Federal Transit Administration provides vibration levels for various types of construction equipment with an average source level reported in terms of velocity. Table 9 provides estimates of vibration levels for a wide range of soil conditions. The reference levels were used to estimate vibration levels at the sensitive receptors most likely to be impacted by equipment at each location of construction activity. Vibration levels are shown in

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Table 10 and discussed in detail for each construction phase.

Table 9
Vibration Velocities for Construction Equipment

Equipment	PPV at 25 feet (Inches/Second)	Approximate L _v at 25 feet ^a
Large Bulldozer (excavator)	0.089	87
Loaded Trucks	0.076	86
Pile Driver (Impact)	0.644	104
Small Bulldozer	0.003	58

^a RMS velocity in decibels (VdB) related to 1 micro-inch/second. Source: TAHA 2015

The maximum vibration levels would be generated during pile driving activity. Vibration levels would be approximately 0.644 inches per second and 104 VdB at 25 feet. The nearest off-site sensitive land use would be approximately 300 feet to the south across Rodeo Road. Pile driving vibration levels would be 0.0155 inches per second and 72 VdB. These levels would be below the significance thresholds of 0.3 inches per second and 75 VdB. In addition, as shown in Table 10, vibration levels would not exceed the significance thresholds at any other off-site sensitive land use, including Dorsey High School.

The project site includes a childcare facility that would be adjacent to construction activity. Vibration levels would exceed the annoyance and building damage thresholds during pile driving activity and the use of heavy-equipment during the construction of the gymnasium and multi-use facility. These vibration levels may be detrimental to the health of the children. Therefore, without mitigation, the proposed project would result in a significant impact related to construction vibration. However, the childcare facility would only operate during afterschool hours (after 3:00pm). Implementation of Mitigation Measure NOI-7 would ensure that pile-driving activities would not occur during the normal business hours of the childcare facility, thereby reducing impacts related to construction vibration to less than significant.

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Sensitive Receptor	Distance from Pile Driving Activity	Vibratio Pha (Inche Seco Inches/	n Level se 1 es Per ond)	Vibratic Pha (Inche Seco Inches/	on Level se 2 es Per ond)
	(Feet)	a	VaB	a	VaB
Multi-Family Residences to the South	300	0.0155	72 ^b	0.0021	55 ^b
Multi-Family Residences to the Southwest	450	0.0084	66 ^b	0.0012	49 ^b
Dorsey High School Track	500	0.0072	65 [°]	0.0010	48 ^c
Dorsey High School Nearest Classroom	800	0.0036	59 ^c	0.0005	42 ^c

Table 10 Estimated Vibration Levels

^a Engineered concrete and masonry (no plaster) building damage impact criterion is 0.3 inches per second.

^b The applicable annoyance impact criterion for residences experiencing frequent events (i.e., over 70 vibration events from the same source per day) is 75 VdB.

^c The applicable annoyance impact criterion for institutional land uses experiencing frequent events (i.e., over 70 vibration events from the same source per day) is 78 VdB. Source: TAHA, 2015.

<u>Off-Site Trucks</u>: In addition to on-site construction activities, construction trucks on the roadway network have the potential to expose vibration-sensitive land uses located near the proposed project access route. As shown in Table 9, loaded trucks generate vibration levels of 0.076 inches per second at a distance of 25 feet. Rubber-tired vehicles, including trucks, do not generate significant roadway vibrations that can cause building damage. It is possible that trucks would generate perceptible vibration at sensitive receptors adjacent to the roadway. However, these would be transient and instantaneous events typical to the roadway network. This level of activity is not considered substantial enough to generate a vibration annoyance. Therefore, construction truck activity would result in a less than significant impact related to vibration.

Operation

The primary sources of proposed project operational-related vibration would

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include vehicles traveling to the project site for events and recreational activities. Vehicular movements would generate similar vibration levels as existing traffic conditions. The proposed project would not introduce any significant stationary sources of vibration, including mechanical equipment that would be perceptible at sensitive receptors. Therefore, operational activity would result in a less than significant impact related to vibration.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the

 project?
 - Reference: L.A. CEQA Thresholds Guide (Section I.2); Noise and Vibration Impact Study, Terry A. Hayes Associates, 2015 (Appendix E)
 - Comment: A significant impact would occur if the project substantially and permanently increased the ambient noise levels in the project vicinity above levels existing without the proposed project.

As discussed in Section 12(a) above, the proposed project would not generate new traffic or include a significant source of mechanical equipment noise. In addition, new surface parking areas would not audibly increase noise levels at any sensitive receptor. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels. The impact would be less than significant.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing
 Image: Second Secon
 - Reference: *City of Los Angeles Municipal Code; Noise and Vibration Impact Study,* Terry A. Hayes Associates, 2015 (Appendix E)
 - Comment: A significant impact would occur if the proposed project created a substantial temporary increase in the ambient noise levels that would conflict with the noise conditions allowed in the City's Noise Ordinance.

As discussed in Section 12(a) above, sensitive receptors around the construction zone would experience increased noise levels associated with construction. Construction noise impacts would be temporary in nature; however, equipment noise levels would exceed the 5 dBA significance threshold at the multi-family residence to the south and southwest. Therefore, without mitigation, the proposed project would result in a significant temporary and periodic increase in ambient noise related to construction activity. With implementation of Mitigation Measures NOI-1 through NOI-9, construction noise impacts would be less than

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
significant.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes
Reference: Noise and Vibration Impact Study, Terry A. Ha (Appendix E)	ayes Ass	sociates	, 2015	
Comment: A significant impact would occur if the propose residing or working in the project area to excessive nois site being located within an airport land use plan or with airport where such a plan has not been adopted.	d projec e levels in two m	t expose due to t illes of a	ed peop he pro <u>p</u> public	ple ject c
The project site is not located within an airport land use located approximately 5.3 miles east of the Santa Monic 5.6 miles northeast of the Los Angeles International Airp from the nearest airport, the proposed project would not or residing in the project area to excessive noise. There occur.	plan. Th ca Munic port. Due expose fore, no	e projec sipal Airp to the o people impact	xt site i port an distanc workin would	s d ce ig
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes
Reference: Noise and Vibration Impact Study, Terry A. Ha (Appendix E)	ayes Ass	sociates	, 2015	
Comment: A significant impact would occur if the propose residing or working in the project area to excessive nois to a private airstrip.	d projec e levels	t expose due to t	ed peo∣ he vici	ple nity
The project site is not located near a private airstrip. The to people working or residing in the project area would c	erefore, occur.	no noise	e impa	cts
13. POPULATION AND HOUSING – Would the project:				
 a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? 			\boxtimes	

Reference: L.A. CEQA Thresholds Guide (Section J.1); General Plan, including the West Adams-Baldwin Hills-Leimert Community Plan

Comment: A significant impact would occur if the proposed project induced substantial population and housing growth through new development in undeveloped areas or by introducing unplanned infrastructure that was not previously evaluated in the adopted community plan or general plan.

The proposed project would provide an updated sports complex for the community of West Adams, Baldwin Hills, Leimert, and other surrounding communities. The proposed project is not intended to induce development, but instead would provide modernized and improved facilities to accommodate the existing users of the sports complex by updating the aging facilities and infrastructure and constructing a regulation-sized pool for competitions. In addition, the need for a new fitness annex and multipurpose room is necessary as the existing childcare facility currently accommodates those functions. The proposed project would not directly induce substantial population growth because it does not include a residential or commercial element. No new employees would be hired to maintain and operate the sports complex. Therefore, the proposed project would not generate any population growth, and the impact would be less than significant.

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

Reference: *L.A. CEQA Thresholds Guide* (Sections J.1 and J.2)

Comment: A significant impact would occur if the proposed project displaced substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The project site does not contain any housing or residential uses. As such, no housing would be displaced or changed as a result of the proposed project. No impact to housing would occur.

c) Displace substantial numbers of people, necessitating the		\square
construction of replacement housing elsewhere?		

Reference: Refer to Section 13 (b) above.

Comment: Refer to Section 13 (b) above.

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14. PUBLIC SERVICES –

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

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Reference: L.A. CEQA Thresholds Guide (Section K.2); City of Los Angeles General Plan Safety Element; Los Angeles Fire Department

Comment: A significant impact would occur if the project required the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

The project site and surrounding area is currently served by Los Angeles Fire Department Station 94, located at 4470 Coliseum Street, Los Angeles (approximately 0.4-mile from project site) and Fire Station 68, located at 5023 Washington Boulevard (approximately 1.2 miles from the project site). In 2015, Station 94 had a response time of 1 minute 12 seconds for non-emergency service (EMS) calls and 1 minute 9 seconds for EMS calls and Station 68 had a response time of 1 minute 9 seconds for Station 94 was 3 minutes 58 seconds for non-EMS and 4 minutes eight seconds for EMS. Travel time for Station 68 was 4 minutes 30 seconds for non-EMS and 4 minutes 18 seconds for EMS. In addition, Station 94 contains the following resources: an assessment engine, brush patrol engine, a light force engine, a paramedic rescue ambulance, and a paramedic rescue ambulance. Both fire stations would provide adequate fire service coverage.

The proposed project does not include new housing or non-residential development that would substantially increase the residential or employee populations in the area; thus, the demand for emergency services would not substantially increase. The proposed project is intended to provide modernized and improved facilities to accommodate the existing users of the sports complex. As such, the proposed project would not increase fire hazards or substantially increase the demand for fire protection services. As a part of the design process, the proposed project would be reviewed by the Los Angeles Fire Department for compliance with fire, life, and safety standards. No impact to fire protection services would occur.

Issues	Potentially	Impact Less Than Significant With	Mitigation Less Than Significant	No Impact
ii) Police protection?				\boxtimes

- Reference: L.A. CEQA Thresholds Guide (Section K.1); Los Angeles Police Department
- Comment: A significant impact would occur if the proposed project resulted in an increase in demand for police services that would exceed the capacity of the police department responsible for serving the site.

The proposed project area is served by the City of Los Angeles Police Department (LAPD), Southwest Division. The nearest station, the Southwest Community Police Station, is located at 1546 West Martin Luther King Jr. Boulevard in Los Angeles, approximately 2.7 miles southeast of the project site. The Southwest Community Police Station has 352 sworn personnel that serve a community of over 165,000 people. A LAPD substation is located at 3560 West Martin Luther King Jr. Boulevard, approximately 1.2 miles southeast of the project site. A substation is an off-site facility where nonemergency crimes can be reported. Additionally, LAPD has patrol areas within the project area, with the project site located within LAPD patrol area 3A31.

As previously stated in Section 14 (a)(i), the proposed project would not directly result in an increase in residential populations or a substantial increase in employee populations. The new sports complex is intended to accommodate existing users of the sports complex and is not expected to generate additional calls for police protection service, as the project site currently operates as a sports complex. As such, implementation and operation of the proposed project would not increase the need for additional police protection services or adversely affect service ratios or response times. No impact to police protection services would occur.

iii) Schools?

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Reference: L.A. CEQA Thresholds Guide (Section K.3)

Comment: A significant impact would occur if the proposed project included substantial employment or population growth that would generate demand for school facilities that exceeded the capacity of the school district responsible for serving the project site.

The proposed project would not provide new housing or additional employment opportunities. The existing sports complex currently employs approximately 50 staff and would not generate additional employment opportunities during operation of the sports complex. Therefore, it would not

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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generate new students or increase the demand on local school systems. The nearest schools, Dorsey High School and View Park Continuation High School, are located directly east of and adjacent to the project site at 3537 Farmdale Avenue and 4701 Rodeo Road, respectively. The proposed project would not adversely affect any existing or planned school facilities; rather, the proposed project would have a beneficial effect on parks by updating aging facilities and infrastructure. No impact to schools would occur.

iv) Parks?

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Comment: A significant impact would occur if the recreation and park services available could not accommodate the population increase resulting from the implementation of the proposed project and new or physically altered facilities were needed.

The project site is currently developed as a sports complex. As previously discussed, the construction of the proposed project would not induce growth, either directly or indirectly, and therefore, would not increase the demand for recreation in the area. In addition, the proposed project would replace existing recreational facilities at the complex with modernized and improved facilities. Therefore, no impacts to parks would occur.

v) Other public facilities?



Reference: None applicable

Comment: A significant impact would occur if the project resulted in the need for new or altered public facilities, such as libraries, due to population or housing growth.

Construction and operation of the proposed project would not induce growth, either directly or indirectly, and, therefore, would not increase the demand for or use of libraries or other public facilities in the area. Therefore, no impact to other public facilities would occur.

Reference: L.A. CEQA Thresholds Guide (Section K.4)

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15. RECREATION -

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

Reference: L.A. CEQA Thresholds Guide (Section K.4)

Comment: A significant impact would occur if the proposed project included substantial employment or population growth that generated demand for public park facilities that would exceed the capacity of existing parks or that substantially affected the level or service of existing park facilities.

The proposed project would replace existing recreational facilities at the Rancho Cienega Sports Complex with modernized and improved facilities. The need for a new sports complex is prompted by several operational needs such as aging facilities and infrastructure, as well as the need to provide a regulation-sized pool that meets competition standards. Additionally, the proposed project would not induce growth, either directly or indirectly, and, therefore, would not increase the demand for parks or other recreational facilities in the area. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Reference: LA CEQA Thresholds Guide

Comment: A significant impact would occur if the proposed project required the construction or expansion of recreational facilities that would have an adverse physical effect on the environment.

The proposed project would construct new facilities at the Rancho Cienega Sports Complex. As previously discussed, the need for a new sports complex is prompted by operational needs such as aging facilities and infrastructure, as well as the need to provide a regulation-sized pool that meets competition standards. The proposed project would also construct a fitness annex and multipurpose room, which are functions currently accommodated within the childcare facility. Therefore, the proposed project would increase and improve the recreational services available within the local community. As such, impacts would be less than significant.

Issues	Potentially	Significant Impact	Less Than	Significant With	Mitigation	Less Than Significant	No Impact
16. TRANSPORTATION/TRAFFIC – Would the project:							
 a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? 							
Reference: L.A. CEQA Thresholds Guide (Section L), Trat Corporation, October 2015 (Appendix F)	fic	Stud	dy,	KO	Ą		

Comment: A project would have a significant traffic impact if the traffic volume to roadway capacity ratio was increased, as shown in Table 11.

Table 11Los Angeles Department of Transportation Significance Thresholdsfor Increases in Peak-Hour V/C Ratios

Level of Service	Final Volume/Capacity Ratio (V/C)	Project Related V/C Increase
С	0.701 – 0.800	Equal to or greater than 0.080
D	0.801 – 0.900	Equal to or greater than 0.040
E and F	> 0.900	Equal to or greater than 0.020

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient, and related project growth and without proposed traffic impact mitigations.

This section evaluates the existing and future (cumulative) traffic conditions on surrounding roadway intersections associated with the implementation of the proposed project. The traffic study is included as Appendix F of this document. The focus of the traffic study is on the construction period of the proposed project. Since the proposed project is intended to provide modernized and improved facilities to accommodate the existing users of the sports complex, the post-construction operations period will not generate significant levels of additional daily traffic.

Construction

For the traffic impact analysis, seven locations were defined as study intersections. Existing intersection traffic volumes were collected on Thursday, October 1, 2015. Counts for the intersection of Crenshaw Boulevard & Rodeo Road were not collected during October 2015 due to all-day road closures for construction activities related to the Crenshaw and Expo Light-Rail Line projects.

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December 2014 counts for that intersection were factored up by one percent to reflect ambient growth. The following are the seven signalized study intersections:

- 1. La Brea Avenue and I-10 WB Off-Ramp
- 2. La Brea Avenue and I-10 EB Off-Ramp
- 3. La Brea Avenue and Jefferson Boulevard
- 4. La Brea Avenue and Rodeo Road
- 5. Martin Luther King Jr Boulevard and Rodeo Road
- 6. Farmdale Avenue and Rodeo Road
- 7. Crenshaw Boulevard and Rodeo Road

In addition, peak hour ingress/egress volumes were collected at the existing Exposition Boulevard driveway on the northwest side of the project site. These volumes were acquired in order to estimate level of usage at the secondary/overflow parking lot, and for input into analysis regarding driveway access changes as part of construction.

Based on the traffic data, five of the seven intersections are currently operating at level of service (LOS) A during the AM and PM peak periods. The intersection of La Brea Avenue and Jefferson Boulevard operates at LOS E during the AM and PM peak periods and the intersection of La Brea Avenue and Rodeo Road operates at LOS F during the AM peak period and LOS E during the PM peak period.

The proposed project would be constructed beginning in December 2016 and is expected to last for 27 months, ending in March 2019. Construction would be conducted in two phases. Based on the anticipated construction equipment and workers, the daily total trips during construction were estimated to be 90 employee trips and 20 truck trips. Based on the daily total of 90 employee trips, 23 inbound trips would occur in the AM peak and 23 outbound trips would occur in the PM peak during demolition activities. Based on the daily total of 20 trucks, 4 truck trips (2 trips in and 2 trips out) would occur during both the AM and PM peak hours.

Haul trucks carrying demolition debris from the project site would travel west on Rodeo Road, north on La Brea Boulevard to I-10. Haul trucks carrying construction equipment and materials to the project site would travel from I-10, south on La Brea Boulevard, and east on Rodeo Road to the project site. As dictated in Chapter 5.3 of the *City of Los Angeles General Plan Mobility Element*,

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Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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a City of Los Angeles Department of Building and Safety permit to approve proposed haul routes would be acquired prior to project construction.

To determine the impacts of peak construction activity on the roadway system, construction-generated traffic was added to existing traffic (year 2015), traffic generated by other projects in the surrounding area, and ambient growth in traffic volumes to determine future (year 2019) plus project conditions. The incremental changes in peak-hour volume-to-capacity (V/C) ratios were then compared to the City of Los Angeles Department of Transportation (LADOT) significance thresholds (shown in Table 11) to determine the traffic impacts. The future traffic conditions without and with peak construction traffic generated by the proposed project at the study intersections are shown in Table 12.

As shown in Table 12, construction of the proposed project is not anticipated to create significant traffic impacts at any of the study intersections. Therefore, traffic impacts during construction would be less than significant.

Operation

This analysis assumes that post-construction operations of the proposed project would not result in an increase in trip generation, as there would be no significant net increase in facility capacity. Traffic impacts during operation would be less than significant.

Additionally, as part of the proposed project, a new driveway would be constructed at the southwestern side of the project site, west of the Jackie Robinson Stadium. The proposed driveway would provide only right-in/right-out access from Rodeo Road to new parking facilities located on the west side of the sports complex. In order to prepare this analysis, AM and PM peak hour driveway counts were taken on Thursday, October 1, 2015 at the existing north driveway that provides access to Exposition Boulevard, near the Metro Expo Line right-of-way.

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	Future Without and With Project Conditions – Peak Hour of Service (2019)										
			Future 2 Pro	2019 No ject	Future With F	e 2019 Project	Change in V/C	Significant Impact?			
			V/C or		V/C or						
		Peak	Delay	LOS	Delay	LOS					
	Study Intersections	Hour	(sec)		(sec)						
1	La Brea Avenue &	AM	0.379	А	0.381	А	0.002	No			
	I-10 WB Off-Ramp	PM	0.548	А	0.549	А	0.001	No			
2	La Brea Avenue &	AM	0.468	А	0.469	А	0.001	No			
	I-10 EB Off-Ramp	PM	0.387	А	0.389	А	0.002	No			
3	La Brea Avenue &	AM	1.050	F	1.050	F	0.000	No			
	Jefferson Boulevard	PM	1.088	F	1.089	F	0.001	No			
4	La Brea Avenue &	AM	1.288	F	1.290	F	0.002	No			
	Rodeo Road	PM	1.137	F	1.139	F	0.002	No			
5	Martin Luther King	AM	0.493	А	0.496	А	0.003	No			
	Jr. Boulevard & Rodeo Road	PM	0.531	А	0.531	А	0.000	No			
6	Farmdale Avenue	AM	0.485	А	0.491	А	0.006	No			
	& Rodeo Road	PM	0.504	А	0.508	А	0.004	No			
7	Crenshaw	AM	0.691	В	0.692	В	0.001	No			
	Boulevard & Rodeo Road	PM	0.770	С	0.773	С	0.003	No			

Table 12 Future Without and With Project Conditions – Peak Hour of Service (2019)

Source: KOA 2015

As a conservative analysis, the volumes from this driveway were analyzed without reduction, to represent a shift of all north parking area vehicle volumes to the new south driveway. It is not expected that the new driveway would operate with the intensity of the volumes analyzed here. The new southern driveway would be one of two driveways providing access to the parking area, the other being the existing north driveway on Exposition Boulevard. The new southern driveway would be limited to right-in/right-out traffic and would be a controlled by bollards during normal operating hours. Special event traffic was not analyzed for this exercise, as such events do not represent typical conditions and the access driveways should provide adequate capacity for day-to-day operations of the park.

The City of Los Angeles does not provide traffic impact analysis methodology for unsignalized intersections. For this analysis of LOS and queuing at the driveway, the *Highway Capacity Manual* (HCM) methodology was used. The HCM method takes into account vehicle volumes, pedestrian and bike movements, user

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defined saturation flow rates, and storage bay lengths. The resulting intersection delay (seconds) is then utilized for identification of a level of service value for that particular peak hour period. The output for this method is a delay (in seconds) value and a level of service for the intersection as a whole. Table 13 shows the anticipated vehicle delay and queue at the proposed driveway.

Table 13 West Driveway Traffic Analysis Existing and Future with **Project Conditions**

	Existir	ng with	vith Future		
	Pro	ject	Proj		
	AM	PM	AM	PM	
	Peak	Peak	Peak	Peak	
	Hour	Hour	Hour	Hour	
Driveway Delay (sec)/LOS	27/D	32.1/D	17.4/C	22.2/C	
Max Driveway queue (vehicles)	0.2	0.3	0.5	0.7	

Source: KOA 2015

As Table 13 shows, the driveway delay (right-in/right-out turns) for the existing with project scenario is 27 seconds per vehicle during the AM peak hour and 32 seconds per vehicle during the PM peak hour. The maximum driveway queue is less than one vehicle at 0.3 during the PM peak hour. Under the future with project scenario, the driveway LOS (right-in/right-out turns) is C during both the AM and PM peak hours. The maximum driveway queue is also less than one vehicle s during the PM peak hour.

Although the driveway delay is approximately half a minute during AM and PM peak hour under the existing scenario, it is not anticipated that this would lead to a severe driveway traffic impact as the vehicle volumes and delay would not cause a long vehicle queue on-site. During large events, such as football games at night, the bollards at the new southern driveway would be removed to reduce driveway delays. Furthermore, the new southern driveway would only be used up to 25 times a year for special events and is not expected to cause a frequent traffic problem. With project implementation, an additional ingress/egress access point for the off-street parking areas would be located at the northwestern driveway of the park, which would also improve on-site traffic circulation. Therefore, impacts associated with operation of the proposed driveway would be less than significant.

b) 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 or highways?

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Reference: *L.A. CEQA Thresholds Guide (Section L); Traffic Study,* KOA Corporation, October 2015 (Appendix F)

Comment: A significant impact would occur if the proposed project conflicted 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 or highways.

The Congestion Management Program (CMP) was created statewide because of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires the analysis of traffic impacts of individual development projects with potentially regional significance. A specific system of arterial roadways and freeways comprises the CMP system. In conformance with CMP Transportation Impact Analysis Guidelines, a traffic impact analysis is conducted at:

- CMP arterial monitoring intersections, including freeway on-ramps or offramps, where the proposed project would add 50 or more vehicle trips during either morning or afternoon weekday peak hours.
- CMP mainline freeway-monitoring locations, where the proposed project would add 150 or more trips, in either direction, during either the morning or afternoon weekday peak hours.

The nearest CMP arterial monitoring location to the project site is at La Cienega Boulevard and Jefferson Boulevard, approximately 1.2 miles northwest of the project site. Based on the trip generation and distribution of the proposed project, it is not expected that 50 or more construction project trips would be added to this nearby CMP intersection. Therefore, no impact to the CMP for Los Angeles County would occur.

The nearest CMP mainline freeway-monitoring location to the project site is on the I-10 freeway to the east of La Brea Avenue, approximately 0.8-mile north of the project site. The proposed project would add fewer than 150 new trips per hour, in either direction, to any freeway segments. Therefore, no impact to the CMP for Los Angeles County would occur.

	Issues	Potentially Significant Impact	Less Than Significant With	Mitigation Less Than Significant	No Impact	
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				\boxtimes	
	Reference: L.A. CEQA Thresholds Guide (Section L)					
	Comment: A significant impact would occur if the propose change in air traffic patterns, including either an increas change in location that results in substantial safety risks	d projec e in traf	t result fic level	ed in a s or a		
	The project site is located approximately 5.3 miles east of the Santa Monica Municipal Airport and 5.6 miles northeast of the Los Angeles International Airport. Neither construction nor operation of the proposed project would affect air traffic patterns. Therefore, no impact to air traffic patterns would occur.					
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Reference: <i>L.A. CEQA Thresholds Guide (Section L.5); Th</i> Corporation, October 2015 (Appendix F)	raffic St	U udy KO	A		
	Comment: A significant impact would occur if the propose increased road hazards due to a design feature or incor	d projec npatible	t substa uses.	antially		
	As previously discussed, construction and operation of t would not result in significant traffic impacts. The propose accessed by Rodeo Road and Exposition Boulevard. A provide additional access from Rodeo Road to the new west side of the sports complex and would be limited to However, the proposed west driveway would only be in and would be controlled by bollards the remainder of the proposed project would not increase hazards to a desig incompatible uses. No impact would occur.	the prop sed proj new driv parking right-in/ use up e year.	vosed pr ect wou veway v facilitie fright-ou to 25 tir Therefo e or hav	roject Ild be would s on th ut traffic nes a y re, the ve any	e 2. vear	
e)	Result in inadequate emergency access? Reference: L.A. CEQA Thresholds Guide (Section L.5 and General Plan Safety Element	□ d L.8); L	os Ang	eles		
	Comment: A significant impact would occur if the propose inadequate emergency access.	d projec	t result	ed in		
	Rodeo Road and Martin Luther King Jr. Boulevard have "selected disaster routes" in the <i>City of Los Angeles Ge</i> <i>Element</i> . As part of standard specifications, construction	e been d <i>neral Pl</i> n that w	esignat <i>an Safe</i> ould dis	ed as e <i>ty</i> srupt		

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	No Impact
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Rodeo Road and/or Martin Luther King Jr. Boulevard would be coordinated with applicable emergency service providers prior to start of construction so that alternative route planning can occur and be implemented if required. In addition, access to emergency vehicles would be maintained at all times during construction. Construction and operation of the proposed project would utilize the current access areas at the project site. Therefore, the proposed project would not affect emergency access or result in inadequate emergency access. No impact would occur.

- f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts,
 in in in iterative transportation (e.g., bus turnouts,
 - Reference: L.A. CEQA Thresholds Guide (Section L); Traffic Study KOA Corporation, October 2015 (Appendix F)
 - Comment: A significant impact would occur if the proposed project conflicted with adopted policies, plans, or programs supporting alternative transportation.

Eight bus lines serve the project area: Metro Lines 212/312, 105, 38, 210, 705, 710, and 740, and the LADOT Crenshaw DASH line. The Metro Expo light rail transit line also serves the project area. Additionally, the nearby signalized intersections of Martin Luther King Jr. Boulevard and Rodeo Road and La Brea Avenue and Rodeo Road, along with an existing mid-block crosswalk located to the east of the project site on Rodeo Road, provide protected pedestrian crossings that allow for safe pedestrian movements.

These crossings would remain accessible during and after construction. Furthermore, the existing sidewalk fronting the project site along Rodeo Road and any bus stops would remain accessible during and after construction in order to ensure safe pedestrian travel and convenient transit access. Overall, the existing sidewalk network and traffic signals at major intersections provide an adequate local pedestrian travel network for the proposed project. As such, no impact to alternative transportation modes or supporting programs would occur.
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Potentially Significant Impact Less Than Significant With	Mitigation Less Than Significant	No Impact
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17. UTILITIES AND SERVICE SYSTEMS – Would the project:

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

Reference: L.A. CEQA Thresholds Guide (Section M.2)

Comment: A significant impact would occur if the proposed project discharged wastewater, which would exceed the regulatory limits established by the LARWQCB.

The proposed project would replace and construct new facilities at the Rancho Cienega Sports Complex. Wastewater generated by the proposed project would be collected and transported through existing local, trunk, and mainline sewers. The quality of wastewater from the proposed project is expected to be typical and would not exceed wastewater treatment requirements of the RWQCB. Impacts would be less than significant.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
 Reference: L.A. CEQA Thresholds Guide (Sections M.1 and M.2)



Comment: A significant impact would occur if the proposed project resulted in the need for new construction or expansion of water or wastewater treatment facilities that could result in an adverse environmental effect that could not be mitigated.

The proposed project would continue to use water and generate wastewater. The proposed project includes the construction and operation of a new indoor pool and bathhouse, a new indoor gymnasium, and new restroom facilities, all of which would require water supply and generate wastewater. However, these proposed new facilities would replace existing similar facilities at the project site. Additionally, the proposed project is intended to provide modernized and improved facilities to accommodate existing users of the sports complex. As such, the proposed project is not expected to substantially increase the current amount of water used or wastewater generated at the project site. Impacts would be less than significant.

Issues	Potentially Significant Impact	Less Than Significant With	Less Than Significant	No Impact
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
Reference: L.A. CEQA Thresholds Guide (Section M.2)				
Comment: A significant impact would occur if the volume the proposed project increased to a level exceeding the drain system serving the project site.	of storm e capacit	water ru y of the	inoff fr storm	om
The proposed project would involve the installation of n drainage infrastructure in the sports complex. These im result in the need for new or expanded storm drain faci system that could result in significant impacts. Therefor operation of the proposed project would result in less th the storm drain system.	new storn aproveme lities else re, the co nan signi	nwater a ents wou ewhere i onstructi ficant im	and uld not n the on and npacts	d to
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			\boxtimes	
Reference: L.A. CEQA Thresholds Guide (Section M.1)				
Comment: Refer to Sections 17 (a) and 17 (b) above.				
e) Result in a determination by the wastewater treatment provider that 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?			\boxtimes	
Reference: L.A. CEQA Thresholds Guide (Section M.2)				
Comment: Refer to Sections 17 (a) and 17 (b) above.				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes	
Reference: L.A. CEQA Thresholds Guide (Section M.3); System (http://www.calrecycle.ca.gov/SWFacilities/Dire Integrated Waste Management Act of 1989 (Assembly	Solid Wa ectory/); (Bill 939)	ste Info Californi	rmatio a	n
Comment: The management of solid waste in the City inv	volves pu	iblic and	l privat	te

refuse collection services as well as public and private operation of solid waste transfer, resource recovery, and disposal facilities. A significant impact would

Issues	Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant No Impact

occur if the proposed project resulted in solid waste generation of five tons or more per week.

The City of Los Angeles Bureau of Sanitation (SAN) and private refuse companies manage the collection, transfer, and disposal of municipal solid waste. There are three types of disposal facilities within state; (1) Class III Landfills (Municipal Solid Waste Landfills), (2) Unclassified (Inert) Landfills, and (3) Transformation (waste to energy) Facilities.

Construction of the proposed project would generate demolition debris during removal of the remaining surface and subsurface structures. Uncontaminated soil may be excavated, stockpiled, redistributed, and reused. Soils that require remediation may be excavated, stabilized, and potentially hauled from the site to a certified disposal facility.

The construction and demolition debris would be recycled whenever possible, or disposed of at an appropriate facility. As demonstrated above and according to the CalRecycle's SWIS database, there is sufficient inert waste disposal capacity available in Los Angeles County to adequately accommodate the anticipated demolition debris. Further, certain landfills accept wastes considered to be beneficial-use materials, such as soil, green waste, and asphalt. Several landfills in the greater Los Angeles area accept excavated soil, including those that otherwise are restricted by ordinances from accepting municipal solid waste generated in the City of Los Angeles. When possible, the waste would be transferred to local yards to minimize traffic disruption as well as the possibility of general spills.

Construction and operation of the proposed project would comply with the requirements of the *California Integrated Waste Management Act of 1989* (*Assembly Bill 939*), which requires the implementation of aggressive solid waste management programs that focus on diverting waste from being disposed of in landfills (such as source reduction, recycling, and composting). In addition, project construction would incorporate source reduction techniques and recycling measures and maintain a recycling program to divert waste in accordance with the *Citywide Construction and Demolition Debris Recycling* Ordinance. As of March 2009, the City had a diversion rate of 65 percent, surpassing the State's requirement for a 50 percent waste diversion rate after 2000, and has set a goal of achieving a 75 percent diversion by 2013. Construction of the proposed project would comply with the *Citywide Construction Demolition Debris Recycling Ordinance.* Therefore, impacts associated with construction debris would result in a less than significant impact on landfill capacity.

Operation of the proposed project would be similar to existing conditions as the

Issues

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant

project site is currently developed as a sports complex. The proposed project would be designed and constructed to meet the U.S. Green Building Council's Leadership in Energy & Environmental Design LEED Silver designation and would incorporate sustainable design features include solar panels, electric vehicle charging stations, use of recycled building materials and LED lighting. Operational solid waste would be minimal and is anticipated to have a less than significant impact on landfill capacity.

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



Reference: L.A. CEQA Thresholds Guide (Section M.3)

Comment: A significant impact would occur if the proposed project generated solid waste that was in excess of or was not disposed of in accordance with applicable regulations.

The City of Los Angeles Solid Waste Management Policy Plan (SWMPP) is the long range solid waste management policy plan for the City. The objective of the SWMPP is to reduce at the source or recycle a minimum of 50 percent of the City's waste and calls for the disposal of the remaining waste in local and possibly remote landfills. The SWMPP establishes citywide diversion objectives, including diversion of 75 percent by 2013. While the SWMPP is the long-range solid waste management policy plan for the City, the Source Reduction and Recycling Element (SRRE) is the strategic action policy plan for diverting solid waste from landfills. The SRRE provides solid waste diversion objectives in accordance with the requirement of AB 939.

As discussed in Section 17(f), the proposed project would generate a nominal amount of solid waste. Furthermore, solid waste generated on-site would be disposed of by permitted solid waste haulers to regulated sites that have adequate capacity and are in compliance with all applicable regulations related to solid waste collection and disposal. Solid waste disposal during construction of and operation of the proposed project would comply with federal, state, local statutes and regulations related to solid waste. As such, impacts would be less than significant.

ssues	Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant	
S OF SIGNIFICANCE		
he potential to degrade the quality stantially reduce the habitat of a cause a fish or wildlife population		
unity reduce the number or		

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18. MANDATORY FINDINGS

a) Does the project have the of the environment, sub fish or wildlife species, o to drop below self-susta a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Reference: Preceding analyses

Comment: No plant or animal species listed on any state or federal lists for endangered, threatened or special status species were identified on-site. The CNDDB indicates that a record of Brauton's milk-vetch (Astragalus brauntonii) and one of southern tarplant (Centromadia parryi ssp. australis) coincide with the project site. Both records are based on initial observations made in the early 1900's and these species are likely extirpated due to the urban developed nature of the project site and lack of potentially suitable habitat on-site to support these, or any other, special-status species. However, due to the presence of ornamental trees which may provide suitable nesting habitat for birds protected under the MBTA, and which may be removed during construction, direct impacts to suitable nesting habitat could occur. Additionally, noise and dust generated during construction could indirectly impact nesting birds by causing them to avoid the area during construction. Should tree removal and construction activities occur during the nesting bird season, generally considered to extend from February 15 through September 15, the implementation of the avoidance and minimization measures provided in Mitigation Measure BIO-1 would ensure that no nesting birds protected under the MBTA are significantly affected.

There are no known cultural resources located on-site. Based upon the CRHR evaluation criteria, one historic property, the Celes King III Pool, was found on the project site that is eligible for listing in the NRHP and the CRHR. However, this property would not be impacted during construction and operation of the new facilities. Demolition of the remaining structures would not eliminate important examples of the major periods of California history or prehistory. However, the area is culturally-sensitive, and there are known cultural resources within the immediate vicinity; Mitigation Measures CULT-1 through CULT-3 are provided to address the potential discovery of previously unknown archeological or paleontological resources, which reduces potentially significant impacts to less than significant.

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

Reference: Preceding analyses

Comment: There are eight related projects that would occur within the immediate vicinity of the project area that are being tracked for purposes of understanding potential cumulative traffic impacts. These related projects are evaluated in Section 16 (a), and potential additive traffic impacts are discussed. Further discussion of related-projects can be found in Appendix F of this IS/MND.

Project-level traffic impacts during construction were less than significant. Therefore, no mitigation measures are required. As a result, construction of the project would not result in a cumulative considerable contribution to a significant cumulative traffic impact to construction.

Operation of the proposed project would not result in significant impacts because the proposed project would not generate substantial new measurable and regular vehicle trips during the operations period, and long-term mitigation measures are therefore not required. The proposed southern driveway is not anticipated to lead to a severe driveway traffic impact as the vehicle volumes and delay would not cause a long vehicle queue on-site. The new southern driveway would only be used up to 25 times a year for special events and is not expected to cause a frequent traffic problem. With project implementation, an additional ingress/egress access point for the off-street parking areas would be located at the northwestern driveway of the park, which would also improve on-site traffic circulation. As such, the proposed project would not result in a cumulative considerable contribution to a significant cumulative traffic impact to operation.

Based on the above, significant cumulative impacts from related-projects are not anticipated in any of the impact categories. The proposed project is consistent with local and regional land use, air quality, water quality, and transportation plans. In addition, the proposed project is not expected to make a cumulatively considerable contribution to a significant cumulative impact. The impact is anticipated to be less than significant.

Potentially Significant Impact Less Than Significant With Mitigation Less Than Significant Vo Impact



Issues	Potentially Significant Impact	Less Than Significant With	Mitigation Less Than Significant	No Impact
c) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?				\boxtimes

Reference: Preceding analyses

Comment: The overall purpose for the proposed project is to construct a community sports complex to better meet the community's recreational needs. The existing sports complex is insufficient to handle the current park programs due to its size and infrastructure. In addition, the aging facilities are a maintenance concern. The proposed project includes construction of new facilities, storm drainage and BMPs. Therefore, the overall project is anticipated to have positive long-term impacts to the environment. No impact is anticipated.

d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?



Reference: Preceding analyses

Comment: With implementation of the mitigation measures listed in Section V below, the proposed project is not anticipated to have significant impacts that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, all potentially significant environmental effects associated with the proposed project can be mitigated to less than significant levels.

V. MITIGATION MEASURES

The following mitigation measures form the foundation of a mitigation monitoring program (MMP) for the proposed project. CEQA requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The program must be adopted by the public agency at the time findings are made regarding the project. The State CEQA Guidelines allow public agencies to choose whether its program will monitor mitigation, report on mitigation, or both (14 CCR Section 15097(c)).

The mitigation measures described herein are supplemental to those required as standard procedure for the City and its contractors. The City and its contractors are the parties responsible for: (1) the necessary implementing actions; (2) verifying that the necessary implementing actions are taken; and (3) the primary record documenting the necessary implementing actions.

The mechanisms for verifying that mitigation measures have been implemented include design drawings, project plans and specifications, construction documents intended for use by construction contractors and construction managers, field inspections, field reports, and other periodic or special reports. All records pertaining to this mitigation program will be maintained and made available for inspection by the public in accordance with the City's records management systems.

Air Quality:

Mitigation Measure AQ-1: The construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.

<u>Mitigation Measure AQ-2</u>: The construction contractor shall implement activity management (e.g. rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts) to the greatest extent possible.

Biological Resources:

<u>Mitigation Measure BIO-1</u>: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed:

- 1. A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.
- 2. If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the nest site.

Cultural Resources:

Mitigation Measure CULT-1: Archaeological monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full time. The archaeological monitor will have the authority to redirect construction equipment in the event potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery will halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5. In addition, it is recommended that the construction personnel and staff receive training on possible archaeological resources that may be present in the area in order to establish an understanding of what to look for during ground-disturbing activities.

If Native American cultural materials are encountered during project-related ground disturbance, a trained Native American consultant should be engaged to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as needed basis and would be intended to ensure that Native American concerns are taken into account during the construction process.

<u>Mitigation Measure CULT-2:</u> Excavations into undisturbed older Quaternary layers, which vary in depth within the project site, shall be monitored. Monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full-time. In the event that potential paleontological resources are encountered, a qualified paleontologist should be retained to recover and record any fossil remains discovered. Any fossils, should they be recovered, shall be prepared, identified, and catalogued before curation in an accredited repository designated by the lead agency.

Mitigation Measure CULT-3: In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found during construction activities, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Geology and Soils:

Mitigation Measure GEO-1: The proposed project grading and foundation plans and specifications shall implement the recommendations presented in the *Geotechnical Engineering Report Rancho Cienega Sports Complex* prepared by the Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group. The proposed project plans and specifications shall also be reviewed by the Geotechnical Engineering Group to ensure proper implementation and application of the recommendations.

<u>Mitigation Measure GEO-2</u>: All grading, excavation, and construction of foundations should be performed under the observation and testing of the Geotechnical Engineer during the following stages:

- Demolition;
- Pile indicator program;
- Pile loading testing;
- Completion of site clearing;
- Site and pool excavation;
- Installation of shoring;
- Production pile installation;
- Subgrade preparation;
- Fill placement;
- Construction of structural mat foundations for accessory structures;
- Excavation and backfilling of all utility trenching; and
- When any unusual or unexpected geotechnical conditions are encountered.

Hazards and Hazardous Materials:

<u>Mitigation Measure HAZ-1</u>: Prior to demolition of existing structures, a demolitionlevel asbestos survey shall be conducted at the project site to identify ACMs. If ACMs are detected, a licensed asbestos abatement contractor shall be retained to remove all ACMs and abate the buildings in compliance with the South Coast Air Quality Management District's Rule 1403, as well as all other state and federal rules and regulations. <u>Mitigation Measure HAZ-2:</u> Prior to demolition of the existing structures, an LBP survey shall be conducted at the project site. The survey shall include the sampling of paint in various representative areas. The samples shall consist of paint chips physically removed from the walls and analyzed for lead. If LBP is detected, a licensed LBP abatement contractor shall be retained to remove all LBP and abate the buildings in compliance with all applicable local, state, and federal regulations.

Noise:

<u>Mitigation Measure NOI-1</u>: Construction equipment shall be properly maintained and equipped with mufflers.

<u>Mitigation Measure NOI-2</u>: The pile driver points of impact shall equipped with a sound apron made of sound absorptive material or dampeners. As discussed in the *Federal Highway Administration Construction Noise Handbook*, sound aprons consist of sound absorptive mats hung from construction equipment or on frames attached to equipment.

<u>Mitigation Measure NOI-3</u>: Construction equipment shall have rubber tires instead of tracks.

<u>Mitigation Measure NOI-4</u>: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

<u>Mitigation Measure NOI-5</u>: A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.

<u>Mitigation Measure NOI-6</u>: The construction manager shall coordinate with the site administrator for Dorsey High School to schedule construction activity such that student exposure to noise is minimized.

<u>Mitigation Measure NOI-7</u>: Pile driving activity shall be limited to between 9:00 a.m. and 3:00 p.m.

<u>Mitigation Measure NOI-8</u>: The public shall be notified in advance of the location and dates of construction hours and activities.

<u>Mitigation Measure NOI-9</u>: As mandated in the *Los Angeles Municipal Code Section 41.40*, construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to increased nighttime noise levels.

PUBLIC WORKS – BUREAU OF ENGINEERING

VI. PREPARATION AND CONSULTATION

A. Preparers

AECOM

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Fareeha Kibriya, Project Director Shannon Ledet, Project Manager Jason Paukovits, Air Quality Specialist Art Popp, Senior Biologist Marc Beherec, Archaeologist Linda Kry, Archaeologist Trina Meiser, Architectural Historian Cristina Chung, Environmental Analyst Erin Murphey, Environmental Analyst Aziz Bakkoury, Graphics

KOA Corporation 1100 Corporate Center Drive, Suite 201 Monterey Park, CA 91754

Brian Marchetti, Senior Transportation Planner Carlos Velasquez, Transportation Planner

Terry A. Hayes Associates, Inc. 8522 National Boulevard, Suite 102 Culver City, CA 90232

Sam Silverman, Senior Environmental Scientist

B. Coordination and Consultation

City of Los Angeles Department of Public Works Bureau of Engineering, Environmental Management Group 1149 South Broadway, Suite 600 Los Angeles, CA 90015

Maria Martin, Manager James R. Tebbetts, Environmental Specialist II

City of Los Angeles Department of Public Works Bureau of Engineering, Architectural Division 1149 South Broadway, 8th Floor Los Angeles, CA 90015

Ohaji K. Abdallah, Architectural Associate II/Project Manager

Department of Recreation and Parks 221 N. Figueroa Street, 1st Floor Los Angeles, CA 90012

Ralph Jordan, Park Director Phillip Wiley, Park Recreation Coordinator

VII. DETERMINATION - RECOMMENDED ENVIRONMENTAL DOCUMENTATION

A. Summary

The proposed project would be implemented in two phases. The components proposed to be implemented in each phase are described below. The detailed construction process and schedule for both phases is described in Subsection G, Project Construction. Figure 4 depicts the proposed project facilities.

Phase 1

Phase 1 would include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the project site and include the following:

- **Indoor Gymnasium**: Demolition of the existing gymnasium and construction of a new, approximately 24,000-square-foot indoor gymnasium east of the Jackie Robinson Stadium and north of the primary parking lot. The proposed indoor gymnasium would include office space, a running path, and a lookout deck on the mezzanine level, and a second floor walkway that would connect the proposed indoor gymnasium to the proposed indoor pool.
- Indoor Pool and Multiuse Building: Demolition of the existing restroom facilities and construction of a new, approximately 25,000-square-foot indoor pool and bathhouse facility in the central portion of the property adjacent to the existing childcare center and north of the proposed primary parking area. The new indoor pool facility would include a bathhouse, restrooms, lockers, and changing rooms on the ground floor, and a community room, fitness annex, and kitchen on the mezzanine level.
- **Tennis Shop/Overlook**: Demolition of the existing tennis shop located directly north of the Celes King III Pool, and construction of a new 1,900-square-foot tennis shop and restroom facility to the west of and adjacent to the existing tennis courts, and east of the existing childcare center. A new overlook would be constructed on the mezzanine level to provide a viewing area of the tennis courts.
- **Stadium Overlook/Concession Stand**: Construction of a new stadium overlook and concession stand east of and adjacent to the existing stadium. The facility would include a include a concession stand, restrooms, and a ticket office on the ground level, and a stadium overlook on the mezzanine level, totaling approximately 4,000 square feet.
- **Playground**: Demolition of the existing playground located between the existing childcare center and tennis courts, in order to accommodate the new tennis shop and restroom facility. A new playground would be constructed directly west of the proposed tennis shop.

• **Primary Parking Lot**: Grading of the existing parking lot located along Rodeo Road and driveway improvements.

Phase 2

Phase 2 would include demolition of the concrete surrounding the existing RAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The majority of the Phase 2 activities would occur in the western and northwestern portion of the project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the project site. The Phase 2 components include the following:

- **RAP Maintenance Yard and Refuse Collection Center**: Rehabilitation of the existing RAP maintenance building and relocation of the RAP maintenance yard adjacent to the northwest corner of the Jackie Robinson Stadium. A new maintenance yard and refuse collection center would be constructed adjacent to the rehabilitated RAP maintenance building.
- **Northwestern Driveway**: Construction of a new driveway at the northwestern boundary of the project site. The driveway would extend towards Exposition Boulevard that currently ends at the parking lot on the northwestern part of the property.
- **Controlled Driveway**: Construction of a new controlled driveway at the southwest corner of the project site near the Jackie Robinson Stadium. The driveway would allow only right-in/right-out access from Rodeo Road when additional parking is required for special events or community programs. Bollards would be located at the driveway to prohibit access during normal operations.
- Off-street Parking: Installation of off-street parking along the western boundary of the project site, adjacent to the Jackie Robinson Stadium. Additional off-street parking would be installed along the northwestern boundary of the project site, adjacent to the new driveway and Metro Expo Rail Line. With installation of off-street parking, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements.
- **Overflow Parking/Multipurpose Field**: Alteration of the existing parking lot in the northwestern portion of the project site to a new multipurpose field and overflow parking area. Based on scheduling, the overflow parking area could be used as a multipurpose field for sporting events or for overflow parking. When used for parking, an additional 88 spaces would be available to park patrons, for a total of 499 parking spaces in the overall park.

• **Community Garden:** Construction of a one-acre community garden in the northwestern portion of the project site, north of Jackie Robinson Stadium and adjacent to the proposed overflow parking/multipurpose field.

B. Recommended Environmental Documentation

On the basis of this initial evaluation, I find that the project could not have a significant effect on the environment, and a **Mitigated Negative Declaration** should be adopted.

Reviewed by: ámes R. Tebbetts Environmental Specialist II Approved by: Maria E. Martin Manager Environmental Management Group

VIII. REFERENCES

AECOM. 2015. Draft Air Quality and Greenhouse Gas Analysis Technical Memorandum.

AECOM. 2015. Draft Cultural Resources Assessment.

- California Department of Conservation. California Geological Survey. Aggregate Sustainability in California. 2012. Available online at: http://www.conservation.ca.gov/cgs/information/publications/ms/Documents/MS_52_ 2012.pdf, accessed October 1, 2015.
- California Department of Conservation. California Geological Survey. Los Angeles County Tsunami Inundation Maps. Available online at: http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/Lo sAngeles, accessed October 1, 2015.
- California Department of Conservation. California Geological Survey. Division of Mines and Geology. Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California. 1998. Available online at: http://gmw.consrv.ca.gov/shmp/download/quad/HOLLYWOOD/reports/holly_eval.pdf , accessed October 1, 2015.
- California Department of Conservation. California Geological Survey. *Earthquake Fault Zones and Seismic Hazard Zones Map, Hollywood Quadrangle.* Available online at: http://gmw.consrv.ca.gov/SHMP/download/quad/HOLLYWOOD/maps/Hollywood_EZRIM/Hollywood_EZRIM.pdf, accessed October 1, 2015.
- California Department of Conservation. California Geological Survey. Special Publication 42: Fault-Rupture Hazard Zones in California. Available online at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sp/Sp42.pdf, accessed October 1, 2015.
- California Department of Conservation. Division of Land Resource Protection. Farmland Mapping and Monitoring Program. Available online at: http://www.conservation.ca.gov/dlrp/fmmp, accessed October 1, 2015.
- California Department of Conservation. Division of Oil, Gas, and Geothermal Resources Well Finder. Available online at: http://www.conservation.ca.gov/dog/Pages/Wellfinder.aspx, accessed October 1, 2015.
- California Department of Fish and Wildlife. *California Natural Diversity Data Base* (*CNDDB*). Full report for Hollywood, Beverly Hills, Burbank, Inglewood, Los Angeles, Pasadena, South Gate, Van Nuys, and Venice Quadrangles. Generated September 30, 2015.

- California Department of Fish and Wildlife, List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base. Natural Heritage Division. The Resources Agency. September 2010. Available online at: http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf. Accessed September 28, 2015.
- California Department of Fish and Wildlife, Special Animals, July 2015. California Natural Diversity Data Base.
- California Department of Fish and Wildlife, State and Federally Listed Endangered and Threatened Animals of California, July 2015. Natural Heritage Division, California Natural Diversity Data Base. Available online at http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf, accessed September 28, 2015.
- California Department of Resources Recycling and Recovery. California Integrated Waste Management Act of 1989 (Assembly Bill 939
- California Department of Resources Recycling and Recovery (CalRecycle). Solid Waste Information System. Available online at: http://www.calrecycle.ca.gov/SWFacilities/Directory/, accessed October 1, 2015.
- California Department of Toxic Substances Control. EnviroStor Database. Available online at: http://www.envirostor.dtsc.ca.gov/public/, accessed October 1, 2015.
- California Department of Transportation. California Scenic Highway Mapping System. Available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed October 1, 2015.
- California Native Plant Society, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: http://www.rareplants.cnps.org/. Accessed September 30, 2015.
- City of Los Angeles Bureau of Engineering. 2015. Geotechnical Data Report.
- City of Los Angeles Department of City Planning. *City of Los Angeles General Plan.* Available online at: http://planning.lacity.org/GeneralPlanIntro.html, accessed October 1, 2015.
- City of Los Angeles Department of City Planning. *West Adam-Baldwin Hills-Leimert Community Plan Generalized Land Use Map.* Available online at: http://planning.lacity.org/complan/central/pdf/genlumap.wad.pdf, accessed September 24, 2015.
- City of Los Angeles Department of City Planning. ; Zone Information & Map Access System (ZIMAS). Website: http://zimas.lacity.org/, accessed August 27, 2015.

- City of Los Angeles Department of Recreation and Parks. Rancho Cienega Sports Complex. Available online at: http://www.laparks.org/dos/reccenter/facility/ranchocienegaRC.htm, accessed September 30, 2015.
- City of Los Angeles Department of Recreation and Parks. *Tree Care Manual*. Available online at: http://www.laparks.org/dos/forest/urbanforestprogram.htm, accessed January 27, 2016.
- City of Los Angeles Environmental Affairs Department. Los Angeles CEQA Thresholds Guide. 2006. Available online at: http://environmentla.org/programs/table_of_contents.htm, accessed October 1, 2015.
- City of Los Angeles Fire Department. Find Your Station, Station List. Available online at: http://www.lafd.org/fire_stations/find_your_station, accessed January 27, 2016.
- City of Los Angeles Police Department. Community Police Station Address Directory. Available online at: http://www.lapdonline.org/our_communities/content_basic_view/6279, accessed January 27, 2016.
- County of Los Angeles Department of Public Health, Bureau of Environmental Protection, Recreational Waters Program. Available online at: http://publichealth.lacounty.gov/eh/EP/rw/rw_main.htm, accessed January 27, 2016.
- Federal Emergency Management Agency. Flood Map Service Center. *Flood Insurance Rate Map, Panel 06037C1615F.* Available online at: https://msc.fema.gov/portal/search, accessed October 1, 2015.
- Federal Emergency Management Agency. Flood Zones Information. Website: http://www.fema.gov/flood-zones, accessed August 27, 2015.
- Holland, R., Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, The Resources Agency. 156 pp. 1986.
- KOA Corporation. 2015. Traffic Study for the Rancho Cienega Sports Complex Project.
- Los Angeles County Department of Regional Planning. Los Angeles County Airport Land Use Commission. Los Angeles County Airports. Available online at: http://planning.lacounty.gov/aluc/airports, accessed October 1, 2015.
- State Water Resources Control Board. GeoTracker Database. Available online at: http://geotracker.waterboards.ca.gov/, accessed October 1, 2015.

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Terry A. Hayes Associates. 2015. Noise and Vibration Impact Study.

U.S.C. Title 33, Chapter 26, Sections 101-607.

List of Appendices

- Appendix A Air Quality and Greenhouse Gas Analysis Technical Memorandum
- Appendix B Biological Resource Search Results
- Appendix C Cultural Resources Assessment
- Appendix D Geotechnical Data Report
- Appendix E Noise and Vibration Impact Study
- Appendix F Traffic Study

XI. CLARIFICATIONS AND MODIFICATIONS

The following clarifications and modifications are intended to update the Draft IS/MND in response to the comments received during the public review period. These changes constitute the Final IS/MND, to be presented to the City of Los Angeles City Council for adoption and project approval. None of the changes to the IS/MND would require recirculation. Revisions made to the IS/MND have not resulted in new significant impacts or mitigation measures, nor has the severity of an impact increased. None of the CEQA criteria for recirculation have been met, and recirculation of the IS/MND is not warranted.

The changes to the IS/MND are listed by section, page number, and paragraph number, if applicable. Text which has been removed is shown with a strikethrough line, while text that has been added is shown as <u>underlined</u>. The changes described in this section have been made in the corresponding Final IS/MND sections. However, the changes below constitute the Final IS/MND. Please refer to Section X, Response to Comments, for referenced comment letters and corresponding comments.

Final MND Clarification/Revision

<u>Page</u>

24

An editorial change is made to Section IV Environmental Effects/Initial Study Checklist, Subsection 3 Air Quality (a), fourth paragraph.

Projects that would be consistent with the 20122013 AQMP would be considered less than significant for this impact. Consistency with the AQMP is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the air quality standards.

25 An editorial change is made to Section IV Environmental Effects/Initial Study Checklist, Subsection 3 Air Quality (a), second paragraph.

The proposed project is consistent with the existing zoning (OS-1XL, Open Space) for the site. In addition, there would be no significant net increase in facility capacity during project operations. Therefore, the proposed project would not substantially increase population or employment in the planning area and would not generate vehicle trips that exceed the current assumptions used to develop the *City of Los Angeles General Plan, Regional Transportation Plan*, and AQMP. Therefore, it is reasonable to assume that the intensity of operational emissions have been accounted for in the 20122013 AQMP. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.

42, 43, 44, An editorial change is made to Section V Environmental Effects/Initial
45 Study Checklist, Subsection 5 Cultural Resources (a)(b)(c)(d), Reference section.

> Reference: L.A. CEQA Thresholds Guide (Section D.3); Draft Cultural Resources Assessment Rancho Cienega Sports Complex (Celes King III Pool) Project (Appendix C)

94 An editorial change is made to Section V Environmental Effects/Initial Study Checklist, Subsection 16 Transportation/Traffic (f), last paragraph.

> These crossings would remain accessible during and after construction. Furthermore, the existing sidewalk fronting the project site along Rodeo Road and any bus stops would remain accessible during and after construction in order to ensure safe pedestrian travel and convenient transit access. Overall, the existing sidewalk network and traffic signals at major intersections provide an adequate local pedestrian travel network for the proposed project. As such, no impact to alternative transportation modes or supporting programs would occur.

111 An editorial change is made to Section V References.

AECOM. 2015. Draft Air Quality and Greenhouse Gas Analysis Technical Memorandum.

111 An editorial change is made to Section V References.

AECOM. 2015. Draft Cultural Resources Assessment.

X. Response to Comments

A. Introduction

The Rancho Cienega Sports Complex Project Draft IS/MND was circulated for public review and comment by the City of Los Angeles on March 3, 2016, initiating a 30-day public review period pursuant to CEQA and its implementing guidelines. The Notice of Intent/Notice of Availability was also distributed to 67 relevant agencies and organizations, as well as 1,084 property owners and occupants. Additionally, the IS/MND was available for review at Baldwin Hills Library, Jefferson/Wright Library, and Council District 10 Office, and online at the Bureau of Engineering's website. During this public review period, a total of four (4) comment letters were received. A Final IS/MND was prepared including responses to comments received on the Draft IS/MND.

Each comment letter has been assigned a number code, and individual comments in each letter have been coded to facilitate responses. For example, the letter from Joyce Dillard is identified as Letter 2, with comments noted as 2-1, 2-2, 2-3, etc. Copies of each comment letter are provided prior to the response to each letter. Comments that raise issues not directly related to the substance of the environmental analysis in the Draft IS/MND are noted but, in accordance with CEQA, did not receive a detailed response.

B. Responses to Written Comments That Address Environmental Issues in the Draft Initial Study/Mitigated Negative Declaration

The written comment letters received on the Draft IS/MND are listed in Table 14 below. The comments and associated responses are arranged by the date of receipt of the comment letter or email. The individual comments in the letters have been numbered and are referred to in the responses that directly follow the comment letter.

Letter #	Agency/Organization/Individual	Date	Page # of Response
1	Bureau of Street Services, Urban Forestry Division Signed: Timothy Tyson	March 4, 2016	119
2	Joyce Dillard	April 1, 2016	155
3	State Clearinghouse Signed: Scott Morgan	April 1, 2016	158
4	Los Angeles County Metropolitan Transportation Authority Signed: Elizabeth Carvajal	April 4, 2016	177

Table 14List of Written Comment Letters

Comment Letter No. 1

1 44FORM GEN. 160 (Rev. 6-80)

CITY OF LOS ANGELES INTER-DEPARTMENTAL CORRESPONDENCE

DATE: March 4th, 2016

TO:

James Tebbetts, Department of Public Works Bureau of Engineering

FROM: Timothy Tyson, Chief Forester Bureau of Street Services, Urban Forestry Division

SUBJECT, 5001 Rodeo Road

In regards to your request for review of this case regarding Urban Forestry requirements. It is our recommendation that:

- 1. Plant street trees and remove any existing trees within dedicated streets or proposed dedicated streets as required by the Urban Forestry Division of the Bureau of Street Services. All street tree plantings shall be brought up to current standards. When the City has previously been paid for tree plantings, the sub divider or contractor shall notify the Urban Forestry Division (213-847-3077) upon completion of construction to expedite tree planting. If Street tree removal is required call 311 or 1 800 996-2489 to initiate the permitting process.
- 2. Prior to the issuance of any permit, a plot plan shall be prepared indicating the location, size, type and general condition of all existing trees on the site and within the adjacent public right(s) of way.
- 3. All significant (8-inch or greater trunk diameter, or cumulative trunk diameter if multitrunk, as measured 54 inches above the ground) non-protected trees on the site proposed for removal shall be replaced at a 1:1 ratio with a minimum 24-inch box size tree. Net, new trees, located within the parkway of the adjacent public right(s)-of –way, may be counted toward replacement tree requirements.

Please contact Urban Forestry Division at: 213-847-3077 for any questions.

Stephen D. ora

Comment Letter 1: Bureau of Street Services, Urban Forestry Division

Response 1-1

This comment includes recommendations that should be implemented as part of the proposed project in order to fully comply with the City's Urban Forestry requirements. As discussed on page 41 of the Draft IS/MND, no trees within the right-of-way are currently slated for removal. However, should any of the trees within the right-of-way require removal, the proposed project would comply with the City's tree removal policy and with Urban Forestry requirements, and if necessary, obtain permits from this division prior to construction.

From: **Joyce Dillard** <<u>dillardjoyce@yahoo.com</u>> Date: Fri, Apr 1, 2016 at 4:01 PM Subject: Comments BOE Rancho Cienaga Sports Complex Project due 4.1.2016 To: James Tebbetts <<u>james.tebbetts@lacity.org</u>>

Watershed quality and degradation issues have not been addressed.

LA Regional Water Quality Control Board issued Municipal Separate Storm Sewer Systems Permit ORDER NO. R4-2012-0175 NPDES PERMIT NO. C. It reads as follows:

D. Permit Coverage and Facility Description

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (see Table 5, List of Permittees), hereinafter **referred to separately as Permittees and jointly as the Dischargers**, discharge storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems. For the purposes of this Order, references to the "Discharger" or "Permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger, or Permittees herein depicting the major drainage infrastructure within the area covered under this Order are included in

Attachment C of this Order.

Ballona Creek Watershed Group is in the Santa Monica Bay Watershed Management Area with the City of Los Angeles as the Lead Agency in the preparation of the EWMP Enhanced Watershed Management Plans and the CIMP Coordinated Integrated Monitoring Program. There exists responsibility for the Receiving Water compliance issues with timelines of

Ballona Creek Trash TMDL September 30, 2015

Ballona Creek Estuary Toxic Pollutants TMDL January 11, 2021

Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL Dry Weather April 27, 2013 Wet Weather July 15, 2021

Ballona Creek Metals TMDL Dry Weather January 11, 2016 Wet Weather January 11, 2021

Joyce Dillard P.O. Box 31377 Los Angeles, CA 90031

Attachment: Order R4-2012-0175-Final Attachment M

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James R Tebbetts Environmental Specialist II Environmental Management Group Bureau of Engineering 1149 S. Broadway, Ste 600 Los Angeles, Ca 90015 213-485-5732 (phone) 213-847-0656 (fax) 2-1 cont'd

ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- 2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
Total coliform*	10,000/100 mL	1,000/100 mL	
Fecal coliform	400/100 mL	200/100 mL	
Enterococcus	104/100 mL	35/100 mL	

Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-tototal coliform exceeds 0.1.

3. Section A.2 above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each individual monitoring location, calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
Total coliform*	10,000/100 mL	1,000/100 mL	
Fecal coliform	400/100 mL	200/100 mL	
Enterococcus	104/100 mL	35/100 mL	

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-tototal coliform exceeds 0.1.

- **4.** Receiving Water Limitations
 - **a.** Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table M-1	
July 15, 2013	25%	
July 15, 2018	50%	

b. Section A.4.a above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total wet weather exceedance day reductions required for each jurisdictional group as identified in Table M-2	
July 15, 2013	25%	
July 15, 2018	50%	

MS4 Discharges within the Coastal Watersheds of Los Angeles County

Table M-1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

MS4 Discharges within the Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175 NPDES NO. CAS004001

Jurisdiction	Primary Jurisdiction	Additional Responsible	Subwatershed(s)	Monitorina Site(s)	Interim Si Receiving Maximum Days d	ngle Sample Water Limit Allowable Ex uring Wet W	Bacteria ations as cceedance eather	
Group		Jurisdictions & Agencies			10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone	
2	City of Los Angeles	County of Los Angeles	Castlerock	SMB 2-1	342	324	294	
)	El Segundo (Dockweiler	Dockweiler	SMB 2-10, SMB 2-				
		only)		11, SMB 2-12, SMB				
		Santa Monica		2-13, SMB 2-14,				
				SMB 2-15				
			Venice Beach	SMB 2-8,				
				SMB 2-9				
			Pulga Canyon	SMB 2-4, SMB 2-5				
			Santa Monica	SMB 2-7				
			Canyon					
			Santa Ynez Canyon	SMB 2-2, SMB 2-3,				
				SMB 2-6				
3	Santa Monica	City of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2,	257	237	203	
		County of Los Angeles		SMB 3-3, SMB 3-4,				
				SMB 3-5, SMB 3-6				
				SMB 3-7, SMB 3-8 [#]				
				SMB 3-9				
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14	
L.	Manhattan Reach	Fl Sequedo	Hermosa	SMR 5-1#	20	20	20	
5					10	2	2	
		Hermosa Beach		SMB 5-2,				
		Redondo Beach		SMB 5-3",				
		County of Los Angeles		SMB 5-4",				

MS4 Discharges within the Coastal Watersheds of Los Angeles County

Maximum Allowable Exceedance Site(s) Days during Wet Xeather Days Auring Wet Xeather 10% 25% 50% Reduction Reduction Reduction Milestone Milestone Milestone 36 36 36 36 36 36	
10% 25% 5 10% 25% 5 10% 25% 5 SMB 6-1, 58 57 5 SMB 6-2, SMB 6-2, 58 57 5 SMB 6-2, SMB 6-2, 58 57 5 SMB 6-3, SMB 6-4, 58 57 5 SMB 6-4, SMB 6-4, 58 57 5 SMB 6-5, SMB 6-6, 58 57 36 36 SMB 7-2, SMB 7-2, 36 36 36 36 36 36 36 57 58 57 58 58 57 36 36 57 58 58 57 36 36 36 57 58 58 57 58 58 57 58 58 58 57 58 58 57 58 58 57 58 58 57 58 58 57 58 58 58	ed(s)
Milestone Milestone Milestone Milestone SMB 6-1, SMB 6-2#, SMB 6-2#, SMB 6-4, SMB 6-4, SMB 6-4, SMB 6-4, SMB 7-1#, SMB 7-1#, SMB 7-2#, SMB 7-9# Milestone Milestone	Ĩ
SMB 6-1, 58 57 56 SMB 6-2*, SMB 6-2*, 58 57 56 SMB 6-4, SMB 6-4, SMB 6-5*, 58 57 56 SMB 6-5*, SMB 6-6*, 36 36 36 36 36 SMB 7-1*, 36	
SMB 6-2 [#] , SMB 6-4, SMB 6-4, SMB 6-5 [#] SMB 7-1 [#] , SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-2 [#] , SMB 7-2 [#] , SMB 7-5 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-9 [#] , SMB 7-9 [#] , SMB 7-9 [#]	
SMB 6-3, SMB 6-4, SMB 6-5*, SMB 6-6* SMB 6-6* SMB 7-1*, SMB 7-1*, 36 SMB 7-3*, 36 SMB 7-4*, 36 SMB 7-5*, 36 SMB 7-6*, 36 SMB 7-6*, 36 SMB 7-8*, 36 SMB 7-9*, 36	
SMB 6-4, SMB 6-5# SMB 6-5# SMB 6-6# SMB 7-1# 36 SMB 7-2# 36 SMB 7-5# 36 SMB 7-6# 36 SMB 7-6# 36 SMB 7-9# 36	
SMB 6-5 [#] , SMB 6-6 [#] SMB 7-1 [#] , 36 36 SMB 7-2 [#] , SMB 7-2 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-6 [#] , SMB 7-6 [#] , SMB 7-9 [#] SMB 7-9 [#]	
SMB 6-6# SMB 7-1#, SMB 7-1#, 36 SMB 7-2#, 36 SMB 7-2#, 36 SMB 7-4#, 36 SMB 7-5#, 36 SMB 7-6*, 36 SMB 7-6*, 5MB 7-9# SMB 7-9# 5MB 7-9#	
SMB 7-1 [#] , 36 36 36 36 SMB 7-2 [#] , 36 36 36 SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-9 [#] SMB 7-9 [#]	
SMB 7-2#, SMB 7-3#, SMB 7-4#, SMB 7-5#, SMB 7-6#, SMB 7-7, SMB 7-9#	
SMB 7-3#, SMB 7-4#, SMB 7-5#, SMB 7-6", SMB 7-7, SMB 7-9#	
SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-9 [#] , SMB 7-9 [#]	
SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-9 [#] , SMB 7-9 [#]	
SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	
SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	
SMB 7-8 [#] , SMB 7-9 [#]	
SMB 7-9 [#]	

implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-3. * The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

MS4 Discharges within the Coastal Watersheds of Los Angeles County

Table M-2: Interim Wet Weather Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

acteria ions as s Beyond Weather	50% Reduction Milestone	218																			
lle Sample B /ater Limitati sedance Day I during Wet	25% Reduction Milestone	327																			
Interim Sing Receiving M Maximum Exce those Allowed	10% Reduction Milestone	393																			
Monitoring	Site(s)	SMB 1-1	SMB 1-13	SMB 1-11,	SMB 1-12,	SMB O-2 [#]	SMB 1-3 [#]	SMB 1-8	SMB 1-14	SMB 1-9	SMB 1-2 [#]	SMB 1-16 [#]	SMB 1-15	SMB 1-6,	SMB 1-7,	SMB O-1 [#]	SMB 1-10	SMB 1-18	SMB 1-4	SMB 1-17 [#]	SMB 1-5
Subwatershed(s)		Arroyo Sequit	Carbon Canyon	Corral Canyon			Encinal Canyon	Escondido Canyon	Las Flores Canyon	Latigo Canyon	Los Alisos Canyon	Pena Canyon	Piedra Gorda Canyon	Ramirez Canyon			Solstice Canyon	Topanga Canyon	Trancas Canyon	Tuna Canyon	Zuma Canyon
Additional Responsible	Jurisdictions & Agencies	Malibu	City of Los Angeles	(Topanga only)	Calabasas (Topanga only)																
Primary Jurisdiction		County of Los Angeles																			
Jurisdiction	Group	-																			

MS4 Discharges within the Coastal Watersheds of Los Angeles County

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acteria ions as 's Beyond Weather	50% Reduction Milestone	212																122									ω
lle Sample B /ater Limitat sedance Day I during Wet	25% Reduction Milestone	318																183									12
Interim Sing Receiving M Maximum Exce those Allowed	10% Reduction Milestone	382																219									15
Monitoring	Site(s)	SMB 2-1	SMB 2-10,	SMB 2-11,	SMB 2-12,	SMB 2-13,	SMB 2-14,	SMB 2-15	SMB 2-8,	SMB 2-9	SMB 2-4,	SMB 2-5	SMB 2-7		SMB 2-2,	SMB 2-3,	SMB 2-6	SMB 3-1,	SMB 3-2,	SIMID 3-3,	SMB 3-4,	SMB 3-5,	SMB 3-6,	SMB 3-7,	CMR 2_R	SMB 3-9	SMB 4-1 [#]
Subwatershed(s)		Castlerock	Dockweiler						Venice Beach		Pulga Canyon		Santa Monica	Canyon	Santa Ynez Canyon			Santa Monica									Nicholas Canyon
Additional Responsible	Jurisdictions & Agencies	County of Los Angeles	El Segundo (Dockweiler	only)	Santa Monica													City of Los Angeles	County of Los Angeles								County of Los Angeles
Primarv Jurisdiction		City of Los Angeles			-													Santa Monica									Malibu
Jurisdiction	Group	0																3									4

Attachment M -TMDLs in the Santa Monica Bay WMA

M-7

MS4 Discharges within the Coastal Watersheds of Los Angeles County

Jurisdiction	Primary Jurisdiction	Additional Responsible	Subwatershed(s)	Monitoring	Interim Sing Receiving W Maximum Exce those Allowed	Jle Sample Ba /ater Limitati sedance Days d during Wet	acteria ons as s Beyond Weather
Group		Jurisdictions & Agencies		Site(s)	10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
Q	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach County of Los Angeles	Hermosa	SMB 5-1#, SMB 5-2, SMB 5-3#, SMB 5-4#, SMB 5-5#	83	25	35
G	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2#, SMB 6-3, SMB 6-4, SMB 6-5#, SMB 6-6#	62	51	34
~	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Rolling Hills Rolling Hills Estates County of Los Angeles	Palos Verdes Peninsula	SMB 7-1#, SMB 7-2#, SMB 7-2#, SMB 7-4#, SMB 7-5#, SMB 7-6#, SMB 7-8#, SMB 7-9#, SMB 7-9#	88	73	64

For those beach monitoring locations subject to the antidegradation implementation provision in the TMDL, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-4.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

c. Permittees shall comply with the following grouped¹ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart e. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Days of the Sing Objective	Exceedance gle Sample (days)
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ² (Year-round)	17	3

d. Section A.4.c above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following grouped³ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart f. below, during dry weather as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Days of the Sing Objective	Exceedance gle Sample (days)
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ⁴ (Year-round)	17	3

¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the subdrainage area to each beach monitoring location.

² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the subdrainage area to each beach monitoring location.

⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.
Permittees shall comply with the following grouped5 final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order: e.

			Anr of th	nual Allowable E le Single Sample	xceedance Da e Objective (da	lys Iys)	
Ctotico Classico	Boosh Monitoria Location	Summer D (April 1 – C	ry Weather October 31)	Winter Dry (November 1 -	Weather - March 31)	Wet We (Year-n	eather ound)
0/8/01 10		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	0	0	17	З
SMB 1-5	Zuma Creek at Zuma Beach	0	0	0	0	17	З
SMB 2-13	Imperial Highway storm drain	0	0	2	~	17	ю
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	0	0	2	~	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	0	0	Ļ	~	4	1
SMB 5-3	Manhattan Beach Pier, southern drain	0	0	Ļ	~	5	1
SMB 5-4	Hermosa City Beach at 26th St.	0	0	3	~	12	2
SMB 5-5	Hermosa Beach Pier	0	0	2	L	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	0	0	3	~	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	0	0	3	٢	9	٢
SMB 6-6	Malaga Cove, Palos Verdes Estates	0	0	~	-	3	1

Table M-3: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

MS4 Discharges within the Coastal Watersheds of Los Angeles County

			Anr of th	iual Allowable E e Single Sample	xceedance Da	ys ys)	
		Summer Di (April 1 – O	ry Weather October 31)	Winter Dry (November 1 -	Weather - March 31)	Wet We (Year-r	eather ound)
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 7-1	Malaga Cove, Palos Verdes Estates	0	0	٢	-	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	0	0	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	0	0	٢	-	5	4
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	0	0	٢	-
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	0	0	1	1	2	٢
SMB 7-6	White's Point, Royal Palms County Beach	0	0	1	1	6	٢
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	0	0	1	1	2	٢
SMB 7-9	Outer Cabrillo Beach	0	0	1	1	3	1

MS4 Discharges within the Coastal Watersheds of Los Angeles County

Bacteria TMDL, Permittees shall comply with the following grouped6 final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation Section A.4.e above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches implementation provision in the TMDL as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL: <u>ب</u>

			Ani of th	nual Allowable E ne Single Sample	xceedance Da e Objective (da	tys) tys)	
	Doodh Monteoring Loonting	Summer D (April 1 – C	ry Weather October 31)	Winter Dry (November 1	Weather – March 31)	Wet We (Year-r	eather ound)
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-2	El Pescador State Beach	0	0	Ļ	Ļ	5	-
SMB 1-3	El Matador State Beach	0	0	L	Ļ	3	-
SMB O-1	Paradise Cove	0	0	6	2	15	3
SMB 1-10	Solstice Creek	0	0	5	Ļ	17	3
SMB O-2	Puerco Canyon Storm Drain	0	0	0	0	9	-
SMB 1-14	Las Flores Creek	0	0	9	Ļ	17	3
SMB 1-16	Pena Creek	0	0	3	1	14	2
SMB 1-17	Tuna Canyon Creek	0	0	2	Ļ	12	2
SMB 2-11	North Westchester Storm Drain	0	0	0	0	17	З
SMB 2-13	Imperial Highway Storm Drain	0	0	4	Ļ	17	З
SMB 3-6	Rose Avenue Storm Drain at Venice Beach	0	0	9	Ļ	17	ю
SMB 4-1	San Nicholas Canyon Creek	0	0	4	Ļ	14	2
SMB 5-1	Manhattan State Beach at 40th Street	0	0	L	L	4	ſ

Table M-4: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

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MS4 Discharges within the Coastal Watersheds of Los Angeles County

			An of th	nual Allowable E le Single Sample	xceedance Da 9 Objective (da	lys lys)	
Ctation ID	Beach Monitoring Location	Summer Dr (April 1 – O	ry Weather october 31)	Winter Dry (November 1 -	Weather - March 31)	Wet We (Year-n	eather ound)
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 5-3	Manhattan Beach Pier, southern drain	0	0	8	٢	9	1
SMB 5-4	Hermosa Beach at 26th Street	0	0	3	~	12	2
SMB 5-5	Hermosa Beach Pier	0	0	2	٢	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south at Redondo Beach	0	0	3	1	14	2
SMB 6-3	Sapphire Street Storm Drain at Redondo Beach	0	0	5	1	17	3
SMB 6-5	Avenue I Storm Drain at Redondo Beach	0	0	4	1	11	2
SMB 6-6	Malaga Cove, Palos Verdes Estates	0	0	L	Ļ	3	1
SMB 7-1	Malaga Cove	0	0	L	Ļ	14	2
SMB 7-2	Bluff Cove	0	0	L	1	0	0
SMB 7-3	Long Point	0	0	L	1	5	1
SMB 7-4	Abalone Cove	0	0	0	0	1	1
SMB 7-5	Portuguese Bend Cove	0	0	1	1	2	1
SMB 7-6	Royal Palms County Beach	0	0	1	1	6	1
SMB 7-8	Wilder Annex	0	0	-	-	2	1
SMB 7-9	Outer Cabrillo Beach	0	0	-	-	3	٢

g. Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)	
Total coliform	1,000/100 mL	
Fecal coliform	200/100 mL	
Enterococcus	35/100 mL	

h. Section A.4.g above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- 2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020⁷, and every year thereafter.
- **3.** Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

⁷ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

Permittees	Baseline ⁸	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 ⁹ (0%)
T ermittees	Dasenne		Annual	Frash Discharge	(gals/yr)	
Agoura Hills ¹⁰	1,044	835	626	418	209	0
Calabasas ¹⁰	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village ¹⁰	3,131	2,505	1,879	1,252	626	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- 2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part VI.E.3:

Constituent	Annual Mass-Based WLA (g/yr)
DDT	27.08
PCBs	140.25

⁸ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

⁹ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

¹⁰ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

3. Compliance shall be determined based on a three-year averaging period.

D. TMDLs in the Malibu Creek Subwatershed

- 1. Malibu Creek and Lagoon Bacteria TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-2.
 - **b.** Water Quality-Based Effluent Limitations
 - i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitatio	ns (MPN or cfu)
Constituent	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

 * Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

ii. Section D.1.b.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitatio	ns (MPN or cfu)
Constituent	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitatio	on (MPN or cfu)
oonstituent	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

iv. Section D.1.b.iii above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitatio	on (MPN or cfu)
oonstituent	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

- c. Receiving Water Limitations
 - **i.** Permittees shall comply with the following grouped¹¹ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
	Daily Sampling	Weekly Sampling		
Summer Dry-Weather (April 1 to October 31)	0	0		
Winter Dry-Weather (November 1 to March 31)	3	1		
Wet Weather ¹² (Year-round)	17	3		

ii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped¹³ final single sample bacteria receiving water limitations for each monitoring location within Malibu Creek and its tributaries during

¹¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

¹² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		
	Daily Sampling	Weekly Sampling	
Dry-Weather (Year-round)	5	1	
Wet Weather ¹⁴ (Year-round)	15	2	

iii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped¹⁵ final single sample bacteria receiving water limitations for each monitoring location within Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
	Daily Sampling Weekly Sampling			
Summer Dry-Weather (April 1 to October 31)	0	0		
Winter Dry-Weather (November 1 to March 31)	9	2		
Wet Weather ¹⁶ (Year-round)	17	3		

iv. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

v. Section D.1.c.iv above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of

¹⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

¹⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

¹⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

vi. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

vii. Section D.1.c.vi above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Creek and its tributaries, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- 2. Malibu Creek Watershed Trash TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-2.
 - b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
 - **c.** Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
Permittees		Ar	nnual Trash Di	scharge (gals/	yr)	
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

- **d.** Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.
- **3.** Malibu Creek Watershed Nutrients TMDL (USEPA established)
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-2.
 - b. Permittees shall comply with the following grouped¹⁷ WLAs per the provisions in Part VI.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibou Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

	WLA		
Time Period	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus	
	Daily Maximum	Daily Maximum	
Summer (April 15 to November 15) ¹⁸	8 lbs/day	0.8 lbs/day	
Winter (November 16 to April 14)	8 mg/L	n/a	

E. TMDLs in the Ballona Creek Subwatershed

- 1. Ballona Creek Trash TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.

¹⁷ USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

¹⁸ The mass-based summer WLAs are calculated as the sum of the allocations for "runoff from developed areas" and "dry weather urban runoff."

- **b.** Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- **c.** Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁹ (pounds of drip-dry trash)

		Sept 30, 2012	Sept 30, 2013	Sept 30, 2014	Sept 30, 2015 ²⁰
	Baseline	(20%)	(10%)	(3.3%)	(0%)
Permittees		Annı	ual Trash Discha	rge (pounds of t	rash)
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	0

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁹ (gallons of uncompressed trash)

	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ²⁰ (0%)
Permittees		Annual Trasl	h Discharge (gal	lons of uncomp	essed trash)
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

¹⁹ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

²⁰ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

- **2.** Ballona Creek Estuary Toxic Pollutants TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - **b.** Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited to Ballona Creek Estuary:

Constituent	Effluent Limitations			
Constituent	Annual	Units		
Cadmium	8.0	kg/yr		
Copper	227.3	kg/yr		
Lead	312.3	kg/yr		
Silver	6.69	kg/yr		
Zinc	1003	kg/yr		
Chlordane	3.34	g/yr		
DDTs	10.56	g/yr		
Total PCBs	152	g/yr		
Total PAHs	26,900	g/yr		

c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

- **d.** Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:
 - i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - **iii.** Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.

- 3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - **b.** Water Quality-Based Effluent Limitations
 - **i.** Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
Total coliform*	10,000/100 mL	1,000/100 mL	
Fecal coliform	400/100 mL	200/100 mL	
Enterococcus	104/100 mL	35/100 mL	

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

ii. Section E.3.b.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
Total coliform*	10,000/100 mL	1,000/100 mL	
Fecal coliform	400/100 mL	200/100 mL	
Enterococcus	104/100 mL	35/100 mL	

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
E. coli	235/100 mL	126/100 mL	

iv. Section E.3.b.iii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria

TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitatio	on (MPN or cfu)
Constituent	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

v. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
E. coli	576/100 mL	126/100 mL	

vi. Section E.3.b.v above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitation (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
E. coli	576/100 mL	126/100 mL	

vii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)		
Constituent	Daily Maximum	Geometric Mean	
Fecal coliform	4000/100 mL	2000/100 mL	

viii. Section E.3.b.vii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitatio	on (MPN or cfu)
Constituent	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

- c. Receiving Water Limitations
 - i. Permittees shall comply with the following grouped²¹ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective*		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather ²² (Year-round)	17**	3	July 15, 2021

* Exceedance days for Ballona Creek Estuary and at the confluence with Ballona Creek Estuary based on REC-1 marine water single sample bacteria water quality objectives (WQO). Exceedance days for Ballona Creek Reach 2 and at the confluence with Ballona Creek Reach 2 based on LREC-1 freshwater single sample bacteria WQO. Exceedance days for Sepulveda Channel based on REC-1 freshwater single sample bacteria WQO.

** In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

ii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria

²¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

TMDL, Permittees shall comply with the following grouped²³ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary:

Time Period	Annual Allowable Exceedance Days of the REC-1 Marine Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	9	2	April 27, 2013
Wet Weather ²⁴ (Year-round)	17	3	July 15, 2021

iii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped²⁵ single sample bacteria receiving water limitations for Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the REC-1 Fresh Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Dry-Weather	5	1	April 27, 2013
Wet Weather ²⁶	15	2	July 15, 2021

iv. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped²⁷ single sample bacteria receiving water limitations for Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2:

²³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Time Period	Annual Allowable Exceedance Days of the LREC-1 Fresh Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Dry-Weather	5	1	April 27, 2013
Wet Weather ²⁸	15*	2	July 15, 2021

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- v. Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021.
- vi. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)	
Total coliform	1,000/100 mL	
Fecal coliform	200/100 mL	
Enterococcus	35/100 mL	

vii. Section E.3.c.vi above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

viii. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at

²⁸ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

Attachment M – TMDLs in the Santa Monica Bay WMA

the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

ix. Section E.3.c.viii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)	
E. coli	126/100 mL	

x. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

xi. Section E.3.c.x above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

- 4. Ballona Creek Metals TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - **b.** Final Water Quality-Based Effluent Limitations

i. Permittees shall comply with the following dry weather²⁹ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

ii. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather³⁰ no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (μg/L)
Copper	24
Lead	13
Selenium	5
Zinc	304

iii. Permittees shall comply with the following wet weather³¹ water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	$1.70 \times 10^{-5} x$ daily storm volume (L)
Lead	5.58 x 10^{-5} x daily storm volume (L)
Selenium	$4.73 \times 10^{-6} x$ daily storm volume (L)
Zinc	$1.13 \times 10^{-4} x$ daily storm volume (L)

³⁰ Ibid.

²⁹ Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

³¹ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs measured at Sawtelle Avenue.

c. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage / MS4 required quality-based eff	Area Served by the to meet the water luent limitations (%)
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	
January 11, 2016	100	50
January 11, 2021	100	100

- **5.** Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - **b.** Permittees shall comply with the following grouped³² WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ³³ (m³/yr)
Total Sediment (suspended	
sediment plus sediment bed	44,615
load)	

F. TMDLs in Marina del Rey Subwatershed

- 1. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)			
Constituent	Daily Maximum	Geometric Mean		
Total coliform*	10,000/100 mL	1,000/100 mL		
Fecal coliform	400/100 mL	200/100 mL		
Enterococcus	104/100 mL	35/100 mL		

^{*} Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

³² The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

³³ The WLA is applied as a 3-year average.

c. Section F.1.b above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Marina del Rey Harbor Mothers' Beach and Back Basins D, E, 2021.

Constituent	Effluent Limitations (MPN or cfu)				
	Daily Maximum	Geometric Mean			
Total coliform*	10,000/100 mL	1,000/100 mL			
Fecal coliform	400/100 mL	200/100 mL			
Enterococcus	104/100 mL	35/100 mL			

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- **d.** Receiving Water Limitations
 - i. Permittees shall comply with the following grouped³⁴ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provision in the TMDL and identified in subpart iii. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021.

Time Period	Annual Allowa Days of the Objecti	Annual Allowable Exceedance Days of the Single Sample Objective (days)		
	Daily Sampling	Weekly Sampling		
Summer Dry-Weather (April 1 to October 31)	0	0		
Winter Dry-Weather (November 1 to March 31)	3	1		
Wet Weather ³⁵ (Year-round)	17	3		

ii. Section F.1.d.i above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria

³⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

TMDL, Permittees shall comply with the following grouped³⁶ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provision in the TMDL and identified in subpart iv. below, during dry weather as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021.

Time Period	Annual Allowa Days of the Objecti	able Exceedance Single Sample ive (days)		
	Daily Sampling	Weekly Sampling		
Summer Dry-Weather (April 1 to October 31)	0	0		
Winter Dry-Weather (November 1 to March 31)	9	2		
Wet Weather ³⁷ (Year-round)	17	3		

iii. Permittees shall comply with the following grouped³⁸ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order:

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station Monitoring ID Location	Summer Dr (April 1 to C	y-Weather October 31)	Winter Dry WeatherWet Weat(November 1 – March 31)(Year-round)		eather round)		
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	
MdRH-9	Basin F, center of basin	0	0	3	1	8	1

iv. Section F.1.d.iii above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following grouped³⁹ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria and Back Basins Bacteria TMDL.

³⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁷ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station Monitoring ID Location	Summer Dr (April 1 to C	ry-Weather October 31)	Winter Dry WeatherWet Weather(November 1 – March 31)(Year-round)		/eather round)		
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	
MdRH-9	Basin F, center of basin	0	0	9	2	8	1

v. Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)	
Total coliform	1,000/100 mL	
Fecal coliform	200/100 mL	
Enterococcus	35/100 mL	

vi. Section F.1.d.v above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F, calculated as defined in the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- 2. Marina del Rey Harbor Toxic Pollutants TMDL
 - **a.** Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - **b.** Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016⁴⁰, expressed as an annual loading of pollutants associated with total suspended solids (TSS) discharged to Marina del Rey Harbor Back Basins D, E, and F:

⁴⁰ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

Constituent	Effluent Limitat	ions
Constituent	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- **e.** Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
 - i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - **ii.** The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - **iii.** Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

Comment Letter 2: Joyce Dillard

Response 2-1

The commenter states that the Draft IS/MND does not address watershed quality degradation issues. Impacts to water quality are discussed in Section IV Environmental Effects/Initial Study Checklist, Subsection 9, Hydrology and Water Quality. The proposed project would not discharge stormwater from a separate storm sewer system into the Coastal Watersheds of Los Angeles County and would not require a municipal separate storm sewer system (MS4) permit. As discussed, the proposed project would require a General Construction Activity Stormwater Permit prior to construction and would require the development and implementation of a SWPPP and BMPs, thereby minimizing impacts on water quality from construction activities to a less than significant level. The proposed project would include stormwater and drainage infrastructure that would direct storm flows to the existing municipal storm drain system during project operation. No operational water quality impact would occur.

Comment Letter No. 3



STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Edmund G. Brown Jr. Governor

April 1, 2016

James R Tebbetts City of Los Angeles 1149 So Broadway, 6th Floor, MS 939 Los Angeles, CA 90015

Subject: Rancho Cienega Sports Complex (Celes King III) (G922) (WO: E1907694) SCH#: 2016031012

Dear James R Tebbetts:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on March 30, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely, and the

Scott Morgan Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov 3-1

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	. 2016031012 Rancho Cienega Sports Los Angeles, City of	Complex (Cele	s King III) (G922) (W	O: E1907694)	
Туре	MND Mitigated Negative Declaration				
Description	The proposed Rancho C of an upgraded and expa proposed project would annex on the 2nd floor; a on the second floor.; a n with a concession stand, existing parking areas. Department of Recreatio collection. Other site imp stormwater and drainage	Cienega Sports anded sports of construct a new a new indoor gy ew tennis shop , restrooms and The proposed p n and Parks m provements incle a infrastructure I	Complex Project (prop omplex in the City of L rindoor pool and bath mnasium with office s with restrooms and te a ticket office; installa roject would also rend aintenance yard and ude upgrades to exist andscaping, and hard	posed project) inclu os Angeles Counci ahouse with a comm space, a running pa ennis overlook; a ne ation of new drivew ovate the existing C building as well as ting parking, securi dscaping.	Ides the development I District 10. The nunity room and fitness th, and a lookout deck ew stadium overlook ays; and upgrades to tity of Los Angeles the existing refuse. ty lighting, additional
Lead Agend	y Contact				
Name	James R Tebbetts				
Agency	City of Los Angeles				
Phone	213-485-5732		Fa	x	
email					
Address	1149 So Broadway, 6th F	Floor, MS 939			
City	Los Angeles		State CA	<i>Zip</i> 90015	
Project Loc	ation				
County	Los Angeles				
City	Los Angeles, City of				
Region					
Lat/Long	30° 01' 22" N / 118° 21' 0	4" W			
Cross Streets	North of Rodeo Road, Ea	st of South La E	Brea Avenue, West of	Farmdale Avenue	
Parcel No.	5046013900 28 Banna	1 4107	Deetien	B	ODDM
I ownsnip	25 Range	1400	Section	Base	SBBIVI
Proximity to	;				
Highways	i-10, SR-187				
Airports	LA Made Europhics				
Kallways	LA Metro Expo Line				
Vaterways	10+ Dersey US to east				
Land Use	Countywide Plan				
		Quality: Rialagi			and Plain/Flooding
i oject issues	Noise: Public Sontions: P	ecreation/Darks	· Soil Freeion/Compo	ayernusuipiiun, Fi	d Waste
2	Toxic/Hazardous; Traffic/	Circulation; Lan	duse	caon oracing, our	u wasie,
Reviewing	Resources Agency; Depa	rtment of Fish a	ind Wildlife, Region 5	; Department of Pa	rks and Recreation;
Agencies	Office of Historic Preserva	ition; Departme	nt of Water Resource	es; California Highw	ay Patrol; Caltrans,
	District 7; Air Resources E	oard; Regional	Water Quality Contro	ol Board, Region 4;	Department of Toxic
	Substances Control; Nativ	e American He	ritage Commission; P	ublic Utilities Comr	nission
	02/01/2010	Deview polot	/2040 5.45	Deview 00/00/00	40
ale Received	03/01/2016 Start of	Review 03/01	End of	review 03/30/20	0

Comment Letter 3: State Clearinghouse

Response 3-1

This comment acknowledges that the City of Los Angeles, Department of Public Works, Bureau of Engineering complied with the State Clearinghouse public review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. No further response to this comment is required.



Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012-2952 213.922.2000 Tel metro.net

April 4, 2016

James R. Tebbetts City of Los Angeles, Department of Public Works Bureau of Engineering 1149 S. Broadway, Suite 600, Mail Stop 939 Los Angeles, CA 90015

RE: Rancho Cienega Sports Complex Project-Mitigated Negative Declaration-City of Los Angeles

Dear Mr. Tebbetts:

Thank you for the opportunity to comment on the Mitigated Negative Declaration for the proposed Rancho Cienega Sports Complex project located at 5001 Rodeo Road in the City of Los Angeles. The proposed project consists of the development of an upgraded and expanded sports complex. The proposed project would construct a new 30,000 square-foot sports complex that would include a new indoor and bathhouse with a community room and fitness annex on the second floor; a new indoor gymnasium with office space, a running path, and a lookout deck on the second floor; a new tennis shop with restrooms and tennis overlook; a new stadium overlook with a concession stand, restrooms and a ticket office; installation of new driveways; and upgrades to existing parking areas. The proposed project would also renovate the existing City of Los Angeles Department of Recreation and Parks (RAP) maintenance yard and building as well as the existing refuse collection. Other site improvements include upgrades to existing parking, security lighting, additional storm water and drainage infrastructure, landscaping, and hard-scaping. This letter conveys recommendations from the Los Angeles County Metropolitan Transportation Authority (LACMTA) concerning issues that are germane to our agency's statutory responsibility in relation to our facilities and services that may be affected by the proposed project.

Metro bus line 105 operates on Rodeo Road and West Martin Luther King Jr. Boulevard, adjacent to the proposed project. Although the project is not expected to result in any long-term impacts on transit, the developer should be aware of the bus services that are present. Please contact Metro Bus Operations Control Special Events Coordinator at 213-922-4632 regarding construction activities that may Impact Metro bus lines at least 30 days in advance of initiating construction activities. For closures that last more than six months, Metro's Stops and Zones Department will also need to be notified at 213-922-5188, 30 days in advance of initiating construction activities. Other municipal bus operators may also be impacted and should be included in construction outreach efforts.

It is noted that the northern boundary of the site of the project is adjacent to the Exposition Light Rail Line Railroad Right-of-Way (ROW). The following concerns related to the project's proximity to the ROW should be addressed:

1. The project sponsor is advised that the Metro Expo light rail currently operates weekday peak service as often as every five minutes in both directions and that trains may operate, in and

4-1

4-2

4-3

	out of revenue service, 24 hours a day, seven days a week, in the ROW proximate to the proposed project.	
2.	Considering the proximity of the proposed project to the railroad ROW, the Metro Expo light rail line will produce noise, vibration and visual impacts. A recorded Noise Easement Deed in favor of LACMTA is required, a form of which is attached. In addition, any noise mitigation required for the project must be borne by the developers of the project and not LACMTA. The easement recorded in the Deed will extend to successors and tenants as well.	4-3 (cont'd)
3.	The project sponsor should notify LACMTA of any changes to the construction/building plans that may impact the use of the ROW.	
4.	There shall be no encroachment onto the railroad ROW. If access is necessary for the applicant or its contractor to enter the ROW during construction, a temporary right-of entry agreement must be obtained from LACMTA. Contact Velma Marshall, Deputy Executive Officer of Real Estate, at 213-922-2415 for right-of-entry permits.	4-4
5.	Considering the proposed project's proximity at this location, the project sponsor'should be advised that construction activities will not be allowed to impact LACMTA property and equipment. Permits for special operations including the use of a pile driver or any other equipment that could come into close proximity to the OCS must be obtained at least one week prior to the start of construction. In addition, any future work affecting the north side of the proposed project, including but not limited to signage/advertisement installation, or any other maintenance work within ten feet of the OCS will require a track allocation permit. Permits allowing for single tracking or a power shutdown must be obtained at least two weeks prior to the start of construction. The contractor should contact the following people regarding track allocation and/or special operation permits: Chol Kim, Rail Operations Assistant Manager at 323-563-5010. Or, the On-Duty Rail Operations Control Center Floor Manager at 323-563-5022.	4-5
6.	During construction, a protection barrier of acceptable material shall be constructed to cover the full height of the building to prevent objects, material, or debris from falling onto the Metro ROW or contacting the electrified OCS and support structures.	4-6
7.	OCS wire overhead should be treated like any high voltage electrical utility wire on any construction site. Proper signage should be posted for equipment working in and around the wires.	4-7
8.	The cross span wires, attached directly to the pole, will not require additional electrical clearance because they will be properly insulated from the contact wire over the tracks.	4-8
9.	Consistent with Zoning Information No. ZI 1117, prior to the City issuing a building permit within 100 feet of the Metro Rail construction area, clearance shall be obtained from LACMTA. LACMTA will need to review engineering drawings and calculations. Please refer to the attached LACMTA "Design Criteria and Standards, Volume III - Adjacent Construction Design Manual" (attached) for more details regarding submitting drawings and calculations to LACMTA for review. Please note that LACMTA requires an Engineering Review Fee for evaluation of any impacts based on adjacency and relationship of the proposed building to the Metro existing structures. For more information, please contact Aspet Davidian at 213-922-5258 / DavidianA@metro.net or Than Win at 213-922-1405 / WinT@metro.net.	4-9

- 10. LACMTA staff shall be permitted to monitor construction activity to ascertain any impact to the ROW.
- 11. The project sponsor should be advised that LACMTA may request reimbursement for costs incurred as a result of project construction/operation issues that cause delay or harm to Metro service delivery or infrastructure.

If you have any questions regarding this response, please contact Elizabeth Carvajal at 213-922-3084 or by email at DevReview@metro.net.

LACMTA Development Review One Gateway Plaza MS 99-23-4 Los Angeles, CA 90012-2952

Sincerely, Elizabeth Carvajal

Transportation Planning Manager

Attachments:

Noise Easement Deed Adjacent Construction Design Manual Operating Systems Interface Section RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY Real Estate Department Deputy Executive Officer - Real Estate P: 213-922-2415 F: 213-922-2400 One Gateway Plaza, Mail Stop 99-18-4 Los Angeles, CA 90012-2932

Space Above Line for Recorder's Use

[Recordation of this Public Document is Exempt from all Recording Fees and Taxes Pursuant to Government Code Section 6103]

Public Agency - No Tax Statement

NOISE EASEMENT DEED

For valuable consideration, receipt of which is hereby acknowledged, (Name of Owner), a

________, for themselves, their heirs, administrators, executors, successors, assigns, tenants, and lessees do hereby grant, bargain, sell, and convey to the **LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**, a public agency existing under the authority of the laws of the State of California ("Grantee"), its successors and assigns, for the use and benefit of the public and its employees, a perpetual, assignable easement in that certain real property in the City of Los Angeles, County of Los Angeles, State of California described in Exhibit "A" attached hereto and incorporated herein by this reference,

Said easement shall encompass and cover the entirety of the Grantors' Property having the same boundaries as the described Property and extending from the subsurface upwards to the limits of the atmosphere of the earth, the right to cause in said easement area such noise, vibrations, fumes, dust, fuel particles, light, sonic disturbances, and all other effects that may be caused or may have been caused by the operation of public transit vehicles traveling along the Project right of way.

Grantor hereby waives all rights to protest, object to, make a claim or bring suit or action of any purpose, including or not limited to, property damage or personal injuries, against Grantee, its successors and assigns, for any necessary operating and maintenance activities and changes related to the Project which may conflict with Grantors' use of Grantors' property for residential and other purposes, and Grantors hereby grants an easement to the Grantee for such activities.

The granting of said Easement shall also establish the Grantors' right to further modify or develop the Property for any permitted use. However, Grantor's rights of development shall not interfere with the continued operation of Grantee's Project.

It is understood and agreed that these covenants and agreements shall be permanent, perpetual, will run with the land and that notice shall be made to and shall be binding upon all heirs, administrators, executors, successors, assigns, tenants and lessees of the Grantor. The Grantee is hereby expressly granted the right of third party enforcement of this easement.

IN WITNESS WHEREOF, the undersigned has caused its/their signature to be affixed this day of _____, 20____

Ву: _____ _____

Name

By: _____ Name

(ATTACH NOTARY SEAL AND CERTIFICATE HERE.)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT CIVIL CODE § 1189 A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. State of California) County of _____ before me, ______ Here Insert Name and Title of the Officer On Date personally appeared Name(s) of Signer(s) who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signature Signature of Notary Public Place Notary Seal Above - OPTIONAL -Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document. Description of Attached Document Title or Type of Document: _____ Document Date: _____ Number of Pages: _____ Signer(s) Other Than Named Above: _____ Capacity(ies) Claimed by Signer(s) Signer's Name: Signer's Name: Corporate Officer - Title(s): Corporate Officer - Title(s): Partner – Limited General Partner - CLimited General Individual
 Attorney in Fact
 Trustee
 Guardian or Conservator
 Other: Individual
 Attorney in Fact
 Trustee
 Guardian or Conservator Guardian or Conservator Trustee
Other: Signer Is Representing: Signer Is Representing:

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CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in the real property conveyed by the foregoing Grant Deed from ______, a California Limited Partnership, ("Grantor") to LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY, a public agency existing under the authority of the laws of the State of California ("LACMTA"), is hereby accepted by the undersigned on behalf of the LACMTA pursuant to authority conferred by resolution of the Board of Directors of the LACMTA, and the Grantee hereby consents to the recordation of this Deed by its duly authorized officer.

Dated this _____ day of _____, 20___

By:

Velma C. Marshall Deputy Executive Officer - Real Estate
ADJACENT CONSTRUCTION DESIGN MANUAL

1.0 INTRODUCTION

- 1.1 Parties planning construction over, under or adjacent to a Metropolitan Transportation Authority (MTA) facility or structure are advised to submit for review seven (7) copies of their drawings and four (4) copies of their calculations showing the relationship between their project and the MTA facilities, for MTA review. The purpose of the MTA review is to reduce the chance of conflict, damage, and unnecessary remedial measures for both MTA and the parties. Parties are defined as developers, agencies, municipalities, property owners or similar organizations proposing to perform or sponsor construction work near MTA facilities.
- 1.2 Sufficient drawings and details shall be submitted at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review of the effects that the proposed project may or may not have on the MTA facilities. An MTA review requires internal circulation of the construction drawings to concerned departments (usually includes Construction, Operations, Maintenance, and Real Estate). Parties shall be responsible for all costs related to drawing reviews by MTA. MTA costs shall be based upon the actual hours taken for review at the hourly rate of pay plus overhead charges. Drawings normally required for review are:
 - A. Site Plan
 - B. Drainage Area Maps and Drainage Calculations
 - C. Architectural drawings
 - D. Structural drawings and calculations
 - E. Civil Drawings
 - F. Utility Drawings
 - G. Sections showing Foundations and MTA Structures
 - H. Column Load Tables
 - I. Pertinent Drawings and calculations detailing an impact on MTA facilities
 - J. A copy of the Geotechnical Report.
 - K. Construction zone traffic safety and detour plans: Provide and regulate positive traffic guidance and definition for vehicular and pedestrian traffic adjacent to the construction site to ensure traffic safety and reduce adverse traffic circulation impact.
 - L. Drawings and calculations should be sent to:

MTA Third Party Administration (Permits Administration) Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, California 90012

1

- 1.3 If uncertainty exists on the possible impacts a project may have on the MTA facilities, and before submitting a formal letter requesting a review of a construction project adjacent to the Metro System, the party or his agent may contact the MTA Third Party Administrator (Permits). The Party shall review the complexity of the project, and receive an informal evaluation of the amount of detail required for the MTA review. In those cases, whereby it appears the project will present no risk to MTA, the Third Party Administrator (Permits) shall immediately route the design documents to Construction, Operations, Maintenance, and Real Estate departments for a preliminary evaluation. If it is then confirmed that MTA risk is not present, the Administrator shall process an approval letter to the party.
- 1.4 A period of 30 working days should be allowed for review of the drawings and calculations. Thirty (30) work days should be allowed for each successive review as required. It is noted that preliminary evaluations are usually produced within 5 working days.
- 1.5 The party shall reimburse the MTA for any technical review or support services costs incurred that are associated with his/her request for access to the Metro Rail System
- 1.6 The following items must be completed before starting any construction:
 - A. Each part of the project's design may be reviewed and approved by the MTA. The prime concern of the MTA is to determine the effect of the project on the MTA structure and its transit operations. A few of the other parts of a project to be considered are overhead protection, dust protection, dewatering, and temporary use of public space for construction activities.
 - B. Once the Party has received written acceptance of the design of a given project then the Party must notify MTA prior to the start of construction, in accordance with the terms of acceptance.
- 1.7 Qualified Seismic, Structural and Geotechnical Oversight

The design documents shall note the name of the responsible Structural Engineer and Geotechnical Engineer, licensed in the State of California.

2.0 REVIEW PROCEDURE

- 2.1 All portions of any proposed design that will have a direct impact on an MTA facility or structure will be reviewed to assure that the MTA facility or structure is not placed in risk at any time, and that the design meets all applicable codes and criteria. Any portion of the proposed design that is to form part of an MTA controlled area shall be designed to meet the MTA Design Criteria and Standards.
- 2.2 Permits, where required by the local jurisdiction, shall be the responsibility of the party. City of L.A. Dept. of Bldg. and Safety and the Bureau of Engineering permit review shall remain in effect. Party shall refer to MTA Third Party Administration policies and procedures, THD5 for additional information.
- 2.3 Monitoring of the temporary support of excavation structures for adjacent construction shall be required in all cases for excavations within the geotechnical zone of influence of MTA structures. The extent of the monitoring will vary from case to case.
- 2.4 Monitoring of the inside of MTA tunnels and structures shall be required when the adjacent

excavation will unload or load the MTA structure or tunnel. Monitoring of vertical and horizontal distortions will include use of extensometers, inclinometers, settlement reference points, tiltmeters, groundwater observation wells, tape extensometer anchor points and load cells, as appropriately required. Acceptable limits of movement will depend on groundwater conditions, soil types and also the length of service the stations and tunnels have gone through. Escorts will be required for the survey parties entering the Metro operating system in accordance with MTA Operating Rules and Procedures. An MTA account number will be established and the costs for the escort monitoring and surveying service will be billed directly to the party or his agent as in section 1.2.

- 2.5 The calculations submitted for review shall include the following:
 - A. A concise statement of the problem and the purpose of the calculation.
 - B. Input data, applicable criteria, clearly stated assumptions and justifying rationale.
 - C. References to articles, manuals and source material shall be furnished with the calculations.
 - D. Reference to pertinent codes and standards.
 - E. Sufficient sketches or drawing references for the work to be easily understood by an independent reviewer. Diagrams indicating data (such as loads and dimensions) shall be included along with adequate sketches of all details not considered standard by MTA.
 - F. The source or derivation of all equations shall be shown where they are introduced into the calculations.
 - G. Numerical calculations shall clearly indicate type of measurement unit used.
 - H. Identify results and conclusions.
 - I. Calculations shall be neat, orderly, and legible.
- 2.6 When computer programs are used to perform calculations, the following information shall accompany the calculation, including the following:
 - A. Program Name.
 - B. Program Abstract.
 - C. Program Purpose and Applications.
 - D. Complete descriptions of assumptions, capabilities and limitations.
 - E. Instructions for preparing problem data.
 - F. Instructions for problem execution.
 - G. List (and explanation) of program acronyms and error messages.
 - H. Description of deficiencies or uncorrected errors.
 - I. Description of output options and interpretations.

- J. Sample problem(s), illustrating all input and output options and hardware execution statements. Typically, these problems shall be verified problems.
- K. Computer printout of all supporting calculations.
- L. The "User's Manual" shall also include a certification section. The certification section shall describe the methods and how they cover the permitted options and uses of the program.
- 2.7 Drawings shall be drawn, to scale, showing the location and relationship of proposed adjacent construction to existing MTA structures at various stages of construction along the entire adjacent alignment. The stresses and deflections induced in the existing MTA structures should be provided.
- 2.8 The short-term and long-term effects of the new loading due to the adjacent construction on the MTA structures shall be provided. The soil parameters and other pertinent geotechnical criteria contained in existing contract documents for the affected structure, plus any additional conditions shall be used to analyze the existing MTA structures.
- 2.9 MTA structures shall be analyzed for differential pressure loadings transferred from the adjacent construction site.

3.0 MECHANICAL CRITERIA

- 3.1 Existing services to MTA facilities, including chilled water and condenser water piping, potable and fire water, storm and sanitary sewer, piping, are not to be used, interrupted nor disturbed without written approval of MTA.
- 3.2 Surface openings of ventilation shafts, emergency exits serving MTA underground facilities, and ventilation system openings of surface and elevated facilities are not to be blocked or restricted in any manner. Construction dust shall be prevented from entering MTA facilities.
- 3.3 Hot or foul air, fumes, smoke, steam, etc., from adjacent new or temporary facilities are not to be discharged within 40 feet of existing MTA ventilation system intake shafts, station entrances or portals. Tunnel ventilation shafts are both intake and discharge structures.
- 3.4 Clear access for the fire department to the MTA fire department connections shall be maintained at all times. Construction signs shall be provided to identify the location of MTA fire department connections. No interruption to fire protection water service will be permitted at any time.
- 3.5 Modifications to existing MTA mechanical systems and equipment, including ventilation shafts, required by new connections into the MTA System, shall only be permitted with prior review and approval by MTA. If changes are made to MTA property as built drawings shall be provided reflecting these changes.

At the option of MTA, the adjacent construction party shall be required to perform the field tests necessary to verify the adequacy of the modified system and the equipment performance. This verification shall be performed within an agreed time period jointly determined by MTA and the Party on a case by case basis. Where a modification is approved, the party shall be held responsible to maintain original operating capacity of the equipment and the system impacted by the modification.

4.0 OPERATIONAL REQUIREMENTS

4.1 GENERAL

- A. Normal construction practices must be augmented to insure adequate safety for the general public entering Metro Stations and riding on Metro Trains and Buses. Design of a building, structure, or facility shall take into account the special safety considerations required for the construction of the facility next to or around an operating transit system.
- B. Projects which require working over or adjacent to MTA station entrances shall develop their construction procedures and sequences of work to meet the following minimum requirements:
 - 1. Construction operations shall be planned, scheduled and carried out in a way that will afford the Metro patrons and the general public a clean, safe and orderly access and egress to the station entrance during revenue hours.
 - 2. Construction activities which involve swinging a crane and suspended loads over pedestrian areas, MTA station entrances and escalators, tracks or Metro bus passenger areas shall not be performed during revenue hours. Specific periods or hours shall be granted on a case-by-case basis.
 - 3. All cranes must be stored and secured facing away from energized tracks, when appropriate.
 - 4. All activity must be coordinated through the MTA Track Allocation process in advance of work activity.

4.2 OVERHEAD PROTECTION - Station Entrances

- A. Overhead protection from falling objects shall be provided over MTA facilities whenever there is possibility, due to the nature of a construction operation, that an object could fall in or around MTA station entrances, bus stops, elevators, or areas designed for public access to MTA facilities. Erection of the overhead protection for these areas shall be done during MTA non-revenue hours.
 - 1. The design live load for all overhead protection shall be 150 pounds per square foot minimum. The design wind load on the temporary structures shall be 20 pounds per square foot, on the windward and leeward sides of the structure.
 - 2. The overhead protection shall be constructed of fire rated materials. Materials and equipment shall not be stored on the completed shield. The roof of the shield shall be constructed and maintained watertight.
- B. Lighting in public areas and around affected MTA facilities shall be provided under the overhead protection to maintain a minimum level of twenty-five (25) footcandles at the escalator treads or at the walking surface. The temporary lighting shall be maintained by the Party.

- C. Wooden construction fencing shall be installed at the boundary of the areas with public access. The fencing shall be at least eight-feet high, and shall meet all applicable code requirements.
- D. An unrestricted public access path shall be provided at the upper landing of the entrance escalator-way in accordance with the following:
 - 1. A vertical clearance between the walking surface and the lowest projection of the shield shall be 8'-0".
 - 2. A clear pedestrian runoff area extending beyond the escalator newel shall be provided, the least dimension of which shall be twenty (20) feet.
 - 3. A fifteen (15) foot wide strip (other than the sidewalk) shall be maintained on the side of the escalator for circulation when the escalator is pointed away from a street corner.
 - 4. A clear path from any MTA emergency exit to the public street shall be maintained at all times.
- E. Temporary sidewalks or pedestrian ways, which will be in use more than 10 days, shall be7constructed of four (4") inch thick Portland cement concrete or four(4") inches of asphaltic concrete placed and finished by a machine.
- 4.3 OVERHEAD PROTECTION Operating Right-of-Way Trackage
 - A. MTA Rail Operations Control Center shall be informed of any intent to work above, on, or under the MTA right-of-way. Crews shall be trained and special flagging operations shall be directed by MTA Rail Operations Control Center. The party shall provide competent persons to serve as Flaggers. These Flaggers shall be trained and certified by MTA Rail Operations prior to any work commencing. All costs incurred by MTA shall be paid by the party.
 - B. A construction project that will require work over, under or adjacent to the at grade and aerial MTA right-of-way should be aware that the operation of machinery, construction of scaffolding or any operation hazardous to the operation of the MTA facility shall require that the work be done during non-revenue hours and authorized through the MTA Track Allocation process.
 - C. MTA flagmen or inspectors from MTA Operations shall observe all augering, pile driving or other work that is judged to be hazardous. Costs associated with the flagman or inspector shall be borne by the Party.
 - D. The party shall request access rights or track rights to perform work during non-revenue hours. The request shall be made through the MTA Track Allocation process.-
- 4.4 OTHER METRO FACILITIES
 - A. Access and egress from the public streets to fan shafts, vent shafts and emergency exits must be maintained at all times. The shafts shall be protected from dust and debris. See

Exhibit A for details.

- B. Any excavation in the vicinity of MTA power lines feeding the Metro System shall be through hand excavation and only after authorization has been obtained through the MTA Track Allocation process. MTA Rail Operations Control Center shall be informed before any operations commences near the MTA power system.
- C. Flammable liquids shall not to be stored over or within 25 feet horizontally of MTA underground facilities. If installed within 25 to 100 feet horizontally of the structure, protective encasement of the tanks shall be required in accordance with NFPA STD 130. Existing underground tanks located within 100 feet horizontally of MTA facilities and scheduled to be abandoned are to be disposed of in accordance with Appendix C of NFPA STD 130. NFPA STD 130 shall also be applied to the construction of new fuel tanks.
- D. Isolation of MTA Facilities from Blast

Subsurface areas of new adjacent private buildings where the public has access or that cannot be guaranteed as a secure area, such as parking garages and commercial storage and warehousing, will be treated as areas of potential explosion. NFPA 130, Standard for Fixed Guideway Transit Systems, life safety separation criteria will be applied that assumes such spaces contain Class I flammable, or Class II or Class III Combustible liquids. For structural and other considerations, isolation for blast will be treated the same as seismic separation, and the more restrictive shall be applied.

E. Any proposed facility that is located within 20 feet radius of an existing Metro facility will require a blast and explosion study and recommendations to be conducted by a specialist who is specialized in the area of blast force attenuation. This study must assess the effect that an explosion in the proposed non-Metro facility will have on the adjacent Metro facility and provide recommendations to prevent any catastrophic damage to the existing Metro facility. Metro must approve the qualifications of the proposed specialist prior to commencement of any work on this specialized study.

4.5 SAFETY REGULATIONS

- A. Comply with Cal/OSHA Compressed Air Safety Orders Title 8, Division 1, Chapter 4, Subchapter 3. Comply with California Code of Regulations Title 8, Title 29 Code of Federal Regulations; and/or the Construction Safety and Health Manual (Part F) of the contract whichever is most stringent in regulating the safety conditions to be maintained in the work environment as determined by the Authority. The Party recognizes that government promulgated safety regulations are minimum standards and that additional safeguards may be required
- B. Comply with the requirements of Chemical Hazards Safety and Health Plan, (per 29 CFR 1910.120 entitled, (Hazardous Waste Operations and Emergency Response) with respect to the handling of hazardous or contaminated wastes and mandated specialty raining and health screening.
- C. Party and contractor personnel while within the operating MTA right-of-way shall

coordinate all safety rules and procedures with MTA Rail Operations Control Center.-

D. When support functions and electrical power outages are required, the approval MUST be obtained through the MTA Track Allocation procedure. Approval of the support functions and power outages must be obtained in writing prior to shutdown.

5.0 CORROSION

- 5.1 STRAY CURRENT PROTECTION
 - A. Because stray currents may be present in the area of the project, the Party shall investigate the site for stray currents and provide the means for mitigation when warranted.
 - B. Installers of facilities that will require a Cathodic Protection (CP) system must coordinate their CP proposals with MTA. Inquiries shall be routed to the Manager, Third Party Administration.
 - C. The Party is responsible for damage caused by its contractors to MTA corrosion test facilities in public right-of-way.

End of Section

SECTION 01 35 14

OPERATING SYSTEM INTERFACE

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Metro Rail Operations Instructions for Track Allocation/Work Permit Process.

1.02 RELATED SECTIONS

- A. Section 01 35 23: Worksite Safety Requirements
- B. Section 01 35 53: Worksite Security Requirements

1.03 REFERENCES

- A. Code of Federal Regulations, Title 29, Chapter XVII, Parts 1910 and 1926 (FED/OSHA);
- B. Title 8 California Code of Regulations (CAL/OSHA);
- C. Title 26 California Code of Regulations (CAL/EPA);

1.04 QUALITY ASSURANCE (Not Used)

1.05 SUBMITTALS (Not Used)

1.06 **DEFINITIONS**

- A. Metro Operating System: Facilities, equipment and installations that are essential for normal revenue operation, including the Metro trackway and equipment therein, traction power facilities, train control rooms, communications equipment, ventilation equipment, and other equipment and elements of infrastructure essential for normal revenue operation.
- B. Revenue Hours: Hours during which passenger carrying trains operate as defined by the current schedule and which may be modified by Operations Control Center (OCC).

1.07 WORK ON EXISTING RIGHT OF WAY

A. In addition to any other requirements of the Contract Documents, construction of this Project will be coordinated with revenue service operations of the LA Metro's Rail Transit System (Metro Rail Operations Control Department). Metro Rail Operations operating conditions are in effect and rail vehicles will be in revenue service daily from approximately 3:30 a.m. continuous until approximately 1:30 a.m. the next day, seven days a week. Contractor shall obtain and become familiar with the current "Daily Metro Rail Operations Schedule" and any revisions issued during the term of this Contract.

- B. Contractor will cause all Work to be performed with regard to time, place and manner so that Metro Rail Operations scheduled revenue service is not disrupted unless expressly provided otherwise herein. All work performed by Contractor or its subcontractors of any tier in the vicinity of the existing track and facilities shall be in accordance with Metro Rail Operations Instructions for Track Allocation/Work Permit Process as outlined in Attachment A to this specification.
- C. It is Contractor's responsibility to apply for and secure the Track Allocation/Work Permit for each and every shift of Limited or Full Access construction, as defined below. If Contractor fails to comply with this requirement, and/or if Contractor or its subcontractors of any tier violate the terms of the Track Allocation Permit, Metro will issue a Stop Work Order to Contractor. The Stop Work Order will be in effect until such time as a Track Permit is secured and/or the violation is corrected. Any delays or costs associated with this requirement shall be borne by Contractor. The Contractor will provide all safety measures and personnel required by Metro. This includes adhering to all wayside protection rules and requirements.
- D. During hours of revenue service, Contractor and/or its subcontractors of any tier will be allowed Limited Access to any track area with Metro Rail Operations revenue service operations through the Project site. Limited Access construction is defined as work more than 10-feet from centerline of the operating track, or any work that includes equipment within 10-feet of the Overhead Contact System or Third Rail. Limited Access construction shall be coordinated daily with Metro Rail Operations through the Track Permit procedure. Contractor shall comply with National and State regulations and Metro Rules and Procedures at all times. Contractor personnel are forbidden to use cell phones within 10 feet of any active track. Violation may result in immediate and permanent removal of violating personnel from the Project.
- E. During the hours when Metro Rail Operations is not in operation, approximately 1:30 a.m. to 3:30 a.m. daily, Contractor and/or its subcontractors of any tier may be permitted access to the existing track and facilities in the construction area, depending upon availability of resources and the needs of other work, such as train testing and maintenance. Any Work performed on the existing track structure and facilities during Non-Revenue hours will be restored by Contractor to complete operating conditions prior to the resumption of scheduled revenue service. Work shall be coordinated each and every time with Metro Rail Operations through the Track Allocation Permit procedures.
- F. Contractor and its subcontractors, regardless of tier, shall not perform any Work that will require an unscheduled disruption of service at any time. All Work shall be performed with sufficient labor, materials, and standby equipment to ensure that unscheduled service disruptions do not occur.

1.08 SAFETY REQUIREMENTS

A. Comply with Code of Federal Regulations, Title 29, Chapter XVII, Parts 1910 and 1926 (FED/OSHA); Title 8 California Code of Regulations (CAL/OSHA); Title 26 California Code of Regulations (CAL/EPA); and any additional Project site rules Metro imposes

pertaining to safety, health, fire and environmental protection identified within the Project Safety Plan; trade association safety standards; and equipment and materials instructions including material safety data sheet, if any. In the event standards conflict, the standard providing the highest degree of protection will prevail.

B. Metro Safety training will be required for all Contractor personnel associated with the construction of any segment that requires Track Allocation/Work Permits. Contractor is solely responsible for compliance with all Federal Railroad Administration training requirements. Contractor shall take special precautions necessary to provide safe conditions for persons working in proximity to Metro's rail operations.

1.09 COOPERATION WITH METRO RAIL OPERATIONS

- A. Metro Rail Operations staff will communicate directly with Contractor if conditions deemed to be an emergency exist. Under emergency conditions, life or property is in immediate danger of loss. Should an emergency condition occur, Contractor shall follow the directions of Metro Rail Operations staff without hesitation.
- B. The application for issuance of Track Allocation/Work Permits where necessary to safeout electrical equipment or overhead catenary, shall be coordinated directly between Contractor and Metro Rail Operations Control staff. Contractor shall maintain the Track Allocation/Work Permit documentation at the work site. Failure to produce the required documentation when requested will result in the cessation of Work until the documentation is produced. No exceptions will be allowed, and the time for completion will not be extended if Work is stopped for the foregoing reason.
- C. Failure to complete the work within the allocated timeframe and hand the tracks back to Metro for safe revenue service is a serious violation of this Contract. <u>Metro shall assign liquidated damages of up to \$3,000 per hour to be compensated by the Contractor for bus-bridging service.</u>

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 35 14

Comment Letter 4: Los Angeles County Metropolitan Transportation Authority

Response 4-1

This comment includes introductory remarks and background information, and does not state a specific concern or question regarding the adequacy of the environmental impact analysis in the Draft IS/MND. No further response to this comment is required.

Response 4-2

The City is aware of the Metro bus line operations adjacent to the proposed project site and would coordinate with LACMTA during and prior to construction activities, as needed, to ensure that existing bus line operations are maintained.

Response 4-3

The proximity of the railroad right-of-way (Metro Expo Rail Line) has been taken into account in the Draft IS/MND analysis as part of the existing environment. The proposed facilities would be located over 600 feet away from the existing Metro Expo Rail Line and are not expected to impact Metro Expo Rail Line operations. The Final Environmental Impact Report/Environmental Impact Statement for the construction of the Metro Expo Rail Line indicates that noise, vibration, and visual impacts would not occur at Rancho Cienega Sports Park. As the Metro Expo Rail Line is an existing light rail line and Rancho Cienega Sports Park is an existing park, a recorded Noise Easement Deed is not required.

Response 4-4

The proximity of the railroad right-of-way (Metro Expo Rail Line) has been taken into account in the Draft IS/MND analysis as part of the existing environment. The proposed facilities would be located a sufficient distance away from the existing light rail line and are not expected to impact use of the LACMTA right-of-way. The City would coordinate with LACMTA, as needed, if construction building plans change, or right-of-entry permits are required.

Response 4-5

Impacts to LACMTA property are not anticipated and no encroachment is expected as part of the implementation of the proposed project. The proposed facilities would be located a sufficient distance away from the Metro Expo Rail Line. Per Federal Highway Administration standards, noise level impacts for use of equipment, such as pile drivers, are typically measured at a distance at 50 feet away. The Expo Line is located over 600 feet away from the proposed buildings; therefore, permits for special operations would not be required and impacts to the overhead catenary system are not anticipated.

Response 4-6

No new buildings are proposed to be constructed adjacent to the Metro Expo Rail Line.

PUBLIC WORKS – BUREAU OF ENGINEERING

The proposed facilities would be located a sufficient distance away from the Metro Expo Rail Line, and no objects, materials, or debris would fall onto or come into contact with the LACMTA right-of-way.

Response 4-7

The City will display proper signage in the event that equipment related to construction of the proposed project is required to work in areas located near the overhead catenary system.

Response 4-8

This requirement for cross span wires is not applicable to this proposed project. No further response to this comment is required.

Response 4-9

The proposed facilities would be located over 600 feet away from the Metro Expo Rail Line; therefore, this requirement is not applicable to this proposed project. No further response to this comment is required.

Response 4-10

This comment states that, during the construction of the proposed project, LACMTA staff shall be permitted to monitor construction activity to ascertain any potential impacts to the right-of-way. The City will coordinate with LACMTA prior to and during the proposed project construction regarding any monitoring required by LACMTA.

Response 4-11

This comment includes advisory information and does not state a specific concern or question regarding the adequacy of the environmental impact analysis in the Draft IS/MND. No further response to this comment is required.

Rancho Cienega Sports Complex Project Initial Study/Mitigated Negative Declaration

APPENDICES

APPENDIX A Air Quality and Greenhouse Gas Analysis Technical Memorandum



Technical Memorandum

То	Ohaji Abdallah, James Tebbetts, City of Los Angeles	Page 1
CC	Fareeha Kibriya, AECOM	
Subject	Rancho Cienega Sports Complex Air Quality and Green	house Gas Analysis
From	Jason Paukovits, AECOM	
Date	December 14, 2015	

AECOM has prepared this technical memorandum to assess the potential air quality and greenhouse gas (GHG) impacts related to construction and operation of the Rancho Cienega project. The analysis of the project's air quality impacts is consistent with guidance from the South Coast Air Quality Management District (SCAQMD) and City of Los Angeles California Environmental Quality Act (CEQA) Guidelines.

Project Description

The proposed Rancho Cienega Sports Complex Project (proposed project) includes the development of a new sports complex in the City of Los Angeles Council District 10. The proposed project would construct a new 30,000 square-foot sports complex that would include a new indoor pool and bathhouse with a community room and weight room on the second floor; a new indoor gymnasium with office space, a running path, and a lookout deck on the second floor; a new tennis shop with restrooms and tennis overlook; a new stadium overlook with a concession stand, restrooms and a ticket office; and installation of new driveways and parking. The proposed project would also renovate the existing City of Los Angeles Department of Recreation and Parks (LARAP) maintenance yard and building. Other site improvements include upgrades to existing parking, security lighting, additional stormwater and drainage infrastructure, landscaping, and hardscaping.

Thresholds of Significance

According to the City of Los Angeles CEQA guidelines, a significant impact related to air quality would occur if implementation of the project would:

- conflict with or obstruct implementation of the applicable air quality plan,
- violate any air quality standard or contribute substantially to an existing or projected air quality violation,
- result in cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard,
- expose sensitive receptors to substantial pollutant concentrations,
- create objectionable odors affecting a substantial number of people.

This section determines whether the potential impacts from construction and operation of the proposed project would result in a significant impact. If the proposed project would exceed the applicable threshold and result in a potentially significant impact, mitigation measures are required to reduce the potential impact to below a level of significance.



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

The SCAQMD monitors air quality within the project area and the South Coast Air Basin, which includes Orange County and portions of Los Angeles, Riverside, and San Bernardino counties. The South Coast Air Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south.

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. The South Coast Air Basin is currently designated as nonattainment for 8-hour ozone and particulate matter with aerodynamic diameter less than 2.5 microns ($PM_{2.5}$) for both state and federal standards and nonattainment for particulate matter with aerodynamic diameter less than 10 microns (PM_{10}) for the state standards.

The most recent Air Quality Management Plan (AQMP) was adopted by the SCAQMD in February 2013 (SCAQMD 2013). The AQMP was prepared by SCAQMD in partnership with the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB), and is the legally enforceable blueprint for how the region will meet and maintain state and federal air quality standards.

Projects that would be consistent with the 2013 AQMP would be considered less than significant for this impact. Consistency with the AQMP is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations, or contribute to a new violation of the air quality standards.

The use of construction equipment in the AQMP is estimated for the region on an annual basis, and construction-related emissions are estimated as an aggregate in the AQMP. The project would not increase the assumptions for off-road equipment use in the AQMP.

Consistency with the AQMP is also determined through evaluation of whether the project would exceed the estimated emissions used as the basis of the AQMP, which are based, in part, on population projections developed by the Southern California Association of Governments (SCAG) for the Regional Transportation Plan. The SCAG forecasts are based on local general plans and other related documents, such as housing elements, that are used to develop population projections and traffic projections.

The proposed project is consistent with the existing zoning (OS-1XL, Open Space) for the site. As discussed in the traffic analysis, there would be no significant net increase in facility capacity during project operations. Therefore, the proposed project would not substantially increase population or employment in the planning area and would not generate vehicle trips that exceed the current assumptions used to develop the City of Los Angeles General Plan, Regional Transportation Plan, and AQMP. Therefore, it is reasonable to assume that the intensity of operational emissions have been accounted for in the 2013 AQMP. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.



Would the project cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

Construction of the proposed project would result in the temporary generation of reactive organic gases (ROG), carbon monoxide (CO), oxides of nitrogen (NO_x), PM_{10} and $PM_{2.5}$ emissions from site preparation, demolition, and construction of project components. ROG, NO_x , and CO emissions are primarily associated with mobile equipment exhaust, including off-road construction equipment and on-road motor vehicles. Fugitive particulate matter (PM) dust emissions are primarily associated with site preparation, excavation, and grading activities and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site.

Construction of the proposed project is anticipated to begin in fourth quarter 2016 and is expected to last for 2.5 years, ending in early 2019. Construction of the proposed project would occur in several phases. Phase 1 would include demolition and hazardous materials abatement, grading, pile installation and foundation construction for all proposed structures, utility installations, building construction, parking lot grading, and landscape and site improvements. The Phase 1 improvements would occur in the southeastern portion of the project site. Phase 1 activities would begin in fourth quarter 2016 and last approximately 17 months.

Phase 2 would include demolition of the concrete surrounding the existing LARAP maintenance yard, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The Phase 2 improvements would occur in the western and northwestern portions of the project site. Phase 2 activities would last approximately 10 months, with construction of the proposed project being completed in early 2019.

Construction of the proposed project would entail the delivery of building materials such as concrete, lumber, landscaping materials, etc. Construction staging of equipment and materials would occur within a portion of the primary parking lot along Rodeo Road and the overflow parking lot at the rear of the complex off of Exposition Boulevard. Trucks delivering construction equipment and materials to the project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the project site. Alternatively, trucks carrying demolition debris from the project site would travel from the project site, west on Rodeo Road, and north on La Brea Avenue to I-10. Construction workers would park in the rear parking lot off of Exposition Boulevard to ensure parking is available for park patrons.

Construction-related emissions associated with typical construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod allows the user to enter project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. Construction-related exhaust emissions for the proposed project were estimated for construction worker commutes, haul trucks, and the use of off-road equipment.

As shown in Table 1, construction emissions for the proposed project would result in maximum daily emissions of approximately 8 pounds of ROG, 28 pounds of NO_x , 24 pounds of CO, 7 pounds of PM_{10} and 2 pounds of $PM_{2.5}$. This conservative estimate of maximum daily emissions would not exceed any of the thresholds of significance. Additional modeling assumptions and details are provided in Attachment A.



	Estimated Emissions (lbs/day)					
	ROG	NOx	со	PM 10	PM _{2.5}	
Phase 1						
2016	2.09	20.37	18.49	5.99	1.69	
2017	7.15	18.43	17.18	2.11	1.19	
2018	8.10	27.58	24.03	2.92	1.66	
Phase 2						
2018	3.01	19.44	22.19	7.26	1.51	
Maximum Daily Emissions	8.10	27.58	24.03	7.26	1.69	
Significance Threshold	75	100	550	150	55	
Exceed Significance?	NO	NO	NO	NO	NO	

Table 1Maximum Daily Regional Construction Emissions

Source: Estimated by AECOM in 2015.

As shown in Table 1, construction-generated emissions of ROG, NO_x , CO, PM_{10} , and $PM_{2.5}$ would not exceed applicable daily emission thresholds established by the SCAQMD and the City of Los Angeles. Therefore, construction emissions would not violate an ambient air quality standard or contribute substantially to an existing violation.

Localized Construction Emissions

Localized emissions of criteria air pollutants and precursors were assessed in accordance with SCAQMD's local significance thresholds (LST) guidance. SCAQMD recommends that lead agencies perform project-specific air quality modeling for projects larger than five acres. For projects less than five acres, the SCAQMD has developed look-up tables showing the maximum mass emissions that would not cause an exceedance of any LST. Since the proposed project site is approximately 30 acres, peak daily localized emissions were estimated using dispersion modeling in general accordance with the SCAQMD guidance. Air dispersion modeling was conducted to examine maximum short term impacts at the onsite After-School Child Care Center (occupied from 3:00 p.m. to 6:00 p.m.), Dorsey High School and surrounding residential housing.

The Environmental Protection Agency (EPA) recommends the use of the American Meteorological Society/EPA Regulatory Model (AERMOD) modeling system for use in modeling multi-source emissions and was used for this analysis. AERMOD can account for plume downwash, stack tip downwash, and point, area, and volume sources. AERMOD also has the ability to simulate impacts at both flat and complex terrain receptors.

The version numbers of the AERMOD model and pre-processors that were used include:

- AERMAP version 11103
- AERMOD version 15181

In order to determine which meteorological station would be most representative of the project site, surface meteorological data were compared for two stations near the proposed project site. The sites included West LA and Lynnwood both provided in AERMOD-ready format from SCAQMD (Figure 1). Meteorological data from West LA (2005-06, 2008-09, 2011) and Lynnwood (2006-07, 2009) were used to generate wind rose plots for both stations to determine which would be most representative for the project location (SCAQMD 2015). The SCAQMD West LA wind rose plot two dominant wind



directions, from the south to southwest and from the northwest (Figure 2). These are believed to be driven in large part by coastal affects (southerly winds) and funneling from Sepulveda Canyon located to the northwest of the station. The Lynnwood meteorological station is located a bit farther away than West LA to the project site; however, it is located farther inland, which is more in line with the project site. Lynwood's wind rose displayed predominantly west-southwesterly flow (Figure 3). The project site is found to be tucked behind an approximate 100-meter rise in elevation to the south/southeast. It would be important to capture this terrain feature in the wind profile, which would block the winds from the south and southeast. For these reasons, the Lynnwood meteorological station was selected for this project. The meteorological data, listed below, was processed with AERMET (version 14134) with the EPA default option.

AERMET requires specification of site characteristics including surface roughness, albedo, and Bowen ratio. These parameters were developed according to the guidance provided by EPA in the most recent revision of the AERMOD Implementation Guide (EPA 2015).

The AERMOD Implementation Guide provides the following recommendations for determining the site characteristics:

- The determination of the surface roughness length should be based on an inverse distance weighted geometric mean for a default upwind distance of 1 kilometer (km) relative to the measurement site. Surface roughness length may be varied by sector to account for variations in land cover near the measurement site; however, the sector widths should be no smaller than 30 degrees.
- 2. The determination of the Bowen ratio should be based on a simple un-weighted geometric mean (i.e., no direction or distance dependency) for a representative domain, with a default domain defined by a 10-km by 10-km region centered on the measurement site.
- 3. The determination of the albedo should be based on a simple un-weighted arithmetic mean (i.e., no direction or distance dependency) for the same representative domain as defined for Bowen ratio, with a default domain defined by a 10-km by 10-km region centered on the measurement site.

As shown in Table 2, SCAQMD provided the surface roughness, albedo, and Bowen ratio for Lynnwood.

ſ	Station	Surface Albedo	Surface Roughness (meters)	Bowen Ratio
	Lynnwood	0.18	0.428	1.0

Table 2 Surface Parameters Used in AERMET Processing for Lynnwood Station.





Figure 1 Locations of Meteorological Stations Relative to Project Site





Figure 2 Wind Rose for SCAQMD West LA Site 2005-06, 2008-09, 2011

WRPLOT View - Lakes Environmental Software





Figure 3 Wind Rose for SCAQMD Lynnwood Site 2006-07, 2009

WRPLOT View - Lakes Environmental Software



Construction of the proposed project is comprised of the following emission sources:

- Off Road Vehicles (Construction Equipment Tailpipe Emissions)
- Earthmoving Activities (Fugitive Dust)

Because construction will be limited to only standard working hours, modeling assumed the following operating schedule 8 a.m. to noon and 1 p.m. to 5 p.m., Monday through Saturday.

Volume Sources

General source set up followed the SCAQMD's Final Localized Significance Threshold Methodology. It has been assumed that emissions from the off-road vehicles are best characterized by volume sources. For the purposes of the dispersion modeling, the project has been divided into three phases:

- Demolition and hazardous materials removal of the indoor gymnasium, restrooms, playground and tennis shop (Phase 1A);
- Construction of the new indoor gymnasium, indoor pool and multiuse building, tennis shop and restrooms, stadium overlook, and parking (Phase 1B); and
- Demolition and construction of the off-street parking, community garden, and overflow parking/multipurpose field (Phase 2).

These sources are illustrated in Figures 4 through 6. The release height is assumed to be 5 meters per volume source. This represents the mid-range of the expected plume rise from frequently used construction equipment during daytime atmospheric conditions.

Area Source

Fugitive dust emissions are treated as a ground-based polygon area source covering the extent of each construction zone. An initial vertical dimension of one meter is assumed to represent vertical spread of the emissions. As with the construction equipment, all fugitive dust emissions are assumed to take place over the 8-hour period between 8 a.m. to noon and 1 p.m. to 5 p.m., Monday through Saturday. The area sources are illustrated in Figures 4 through 6.

Receptors

Receptors were placed over areas immediately adjacent to the property. The receptors are shown in Figure 7. Receptor elevations and hill heights were assigned using USEPA AERMAP and digital terrain elevations from the National Elevation Dataset. The National Elevation Dataset was developed by the United States Geological Survey and provides terrain elevations with 1-meter vertical resolution and 10-meter horizontal resolution based on a Universal Transverse Mercator (UTM) coordinate system. For each receptor location, the terrain elevation was set to the elevation for the closest National Elevation Dataset grid point. Lakes Environmental software was used for assigning elevations to various receptors and hill heights.



Figure 4 Phase 1A Demolition Sources





Figure 5 Phase 1B Construction Sources







Figure 6 Phase 2 Demolition and Construction Sources



Figure 7 Receptor Locations





Table 3 presents the maximum unmitigated localized emission concentrations during a single day of construction that may potentially impact the school and nearby residences.

Table 3
Unmitigated On-Site Emissions
Highest Overall Model Result from Child Care Center and Offsite Impacts

	СО		NO ₂ ⁽¹⁾	PM ₁₀		PM _{2.5}
	Averaging Time					
	1-Hour	8-Hour	1-Hour	Annual	24	-Hour
Phase 1A: Demolition						
Maximum Modeled Concentration (µg/m ³)				0.01	4.58	1.14
Maximum Modeled Concentration (ppmv)	0.32	0.14	0.26			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m ³	10.4 µg/m ³
Significant Impact?	No	No	YES	No	No	No
	1				•	
Phase 1B: Construction						
Maximum Modeled Concentration (µg/m ³)				0.59	2.32	0.91
Maximum Modeled Concentration (ppmv)	0.75	0.23	0.56			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m ³	10.4 µg/m ³
Significant Impact?	No	No	YES	No	No	No
	1					
Phase 2: Demolition and Construction						
Maximum Modeled Concentration (µg/m ³)				0.12	7.22	1.76
Maximum Modeled Concentration (ppmv)	0.28	0.08	0.17			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 μg/m ³	10.4 µg/m ³	10.4 µg/m ³
Significant Impact?	No	No	No	No	No	No

(1) EPA default NO_x to NO₂ conversion rates of 0.8 (1-hour NO₂) applied to modeled NO_x concentrations.

As shown in Table 3, modeled concentrations during Phase 1 construction activities exceed the LST for NO2 emissions. Therefore, construction emissions could violate an ambient air quality standard or contribute substantially to an existing violation. This impact would be potentially significant. To reduce construction-related emissions, the proposed project shall implement all applicable control measures for the duration of the construction period, as follows:

AQ-1 The construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.



AQ-2 The construction contractor shall implement activity management (e.g. rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts) to the greatest extent possible.

Emission reductions were estimated for mitigation measure AQ-1, which requires the use of Tier 4 engines. Potential reductions were not estimated for mitigation measure AQ-2 because it is not known the extent to which it would be incorporated into construction of the proposed project. Table 4 shows the maximum localized concentrations based on the mitigated emissions during a single day of construction that may potentially impact the school and nearby residences.

	CC)	NO ₂ ⁽¹⁾	PM ₁₀		PM _{2.5}
	Averaging Time					
	1-Hour	8- Hour	1-Hour	Annual	24	-Hour
Phase 1A: Demolition						
Maximum Modeled Concentration (µg/m ³)				0.04	4.09	0.64
Maximum Modeled Concentration (ppmv)	0.31	0.09	0.013			
LST Threshold	20	9	0.18	1.0	10.4	10.4
Significant Impact?	ppm No	ppm No	ppm No	μg/m No	μg/m No	hg/m
			110		no	110
Phase 1B: Construction						
Maximum Modeled Concentration (µg/m ³)				0.004	0.07	0.03
Maximum Modeled Concentration (ppmv)	0.69	0.21	0.065			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0 µg/m ³	10.4 µg/m ³	10.4 µg/m ³
Significant Impact?	No	No	No	No	No	No
	•					
Phase 2: Demolition and Construction						
Maximum Modeled Concentration (µg/m ³)				0.03	6.38	0.25
Maximum Modeled Concentration (ppmv)	0.26	0.08	0.010			
LST Threshold	20 ppm	9 ppm	0.18 ppm	1.0	10.4	10.4 ug/m ³
Significant Impact?	No	No	No	No	No	No

 Table 4

 Modeling Results (Highest Overall Model Result from Child Care Center and Offsite Impacts)

(1) EPA default NO_x to NO_2 conversion rates of 0.8 (1-hour NO_2) applied to modeled NO_x concentrations.

As shown in Table 4, the mitigated NO2 emission concentrations would not exceed the SCAQMD threshold of significance with the implementation of mitigation measures AQ-1 and AQ-2. Therefore, implementation of mitigation measures AQ-1 and AQ-2 would reduce significant impacts of NO_x emissions to a less than significant level.

As shown in Tables 1 and 4, the maximum daily construction-generated emissions and emission concentrations of ROG, NO_x , CO, PM_{10} , and $PM_{2.5}$ would not exceed applicable mass emission or localized significance thresholds established by SCAQMD. Therefore, construction emissions would



not violate an ambient air quality standard or contribute substantially to an existing violation, and the impact would be less than significant with mitigation.

Operation

Operation and maintenance of the new sports complex would be the responsibility of LARAP, similar to existing conditions. Following construction, the number of staff would remain the same as existing conditions with 20 staff for the gymnasium and childcare center, 20 staff for the pool facility, and 10 maintenance staff. Therefore, operational emissions would also be anticipated to be similar to existing conditions. Impacts related to violation of air quality standards would be less than significant. No mitigation measures would be required.

Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The SCAQMD cumulative analysis focuses on whether a specific project would result in cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the South Coast Air Basin, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The SCAQMD thresholds of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable incremental contribution to the existing cumulative air quality conditions. If a project's emissions would be less than those threshold levels, the project would not be expected to result in a considerable incremental contribution to the significant cumulative impact.

Because the proposed project would exceed the SCAQMD project-level air quality localized significance thresholds for NO_x emissions, the proposed project's construction emissions would have a cumulatively considerable contribution to the region's air quality. Therefore, the cumulative impact would be significant. As discussed above, the proposed project would not result in the generation of criteria air pollutant emissions at levels that any of the SCAQMD regional and localized thresholds for construction or operational activities with implementation of mitigation measures AQ-1 and AQ-2. Therefore, impacts would be less than significant with mitigation.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to air pollutant emissions and should be given special consideration when evaluating air quality impacts from projects. These people include children, older adults, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a location such as residence, hospital, convalescent facility where it is possible that an individual could remain for 24 hours. Sensitive receptors within the vicinity of the proposed project site include Dorsey High School adjacent and to the east, residences directly to the south across Rodeo Road, and residences to the west across La Brea Avenue. The project site includes a childcare facility, which is open from 3:00 p.m. to 6:00 p.m.

Construction

The greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate matter (diesel PM) emissions associated with heavy-duty construction equipment operations. Heavy-duty construction equipment would operate during the 27-month construction period and would cease



following buildout of the proposed project. As discussed above, AECOM performed dispersion modeling in general accordance with SCAQMD guidance for LST. Construction emissions would occur intermittently throughout the day and would not occur as a constant plume of emissions from the project site.

A health risk assessment (HRA) was performed to evaluate the emissions of TACs during construction activities and their effects on nearby receptors, including the onsite After-School Child Care Center (occupied from 3 p.m. to 6 p.m.), Dorsey High School and surrounding residential housing.

The HRA was performed in accordance with the new *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments* (SRP Draft) developed by the Office of Environmental Health Hazard Assessment (OEHHA) for conducting HRAs in California under the Air Toxics "Hot Spots" Program, as well as methodologies from the *Health Risk Assessments for Proposed Land Use Projects* (CAPCOA 2009).

The HRA was performed outside the Hotspots Analysis and Reporting Program (HARP2) modeling system using the USEPA regulatory model AERMOD (version 15181), which estimates both short-term and long-term average ambient concentrations at receptor locations to produce exposure estimates. Excess lifetime cancer risks, chronic noncancer hazard index (HI), and acute noncancer HI were estimated as part of the HRA. The estimated excess lifetime cancer risks, chronic and acute noncancer HIs were compared to the thresholds for significance for TACs for a maximally exposed individual at an existing residential receptor (MEIR) and maximally exposed individual at an existing occupational worker receptor (MEIW).

The estimated cancer risk was based on the annual average diesel PM concentration, inhalation potency factor, and default estimates of breathing rate, body weight, and exposure period calculated by HARP2. In addition to the potential cancer risk, diesel PM may result in chronic non-cancer health impacts. There is no acute risk threshold for diesel PM. The exposure level is the concentration below which no adverse non-cancer health effects are anticipated.

Table 5 shows the maximum cancer risk, acute HI, and chronic HI for construction of the proposed project. The maximum cancer risk due to unmitigated construction emissions was determined to be 0.01 in 1 million for the Child Care Center, 0.01 in 1 million for the Adult Resident and 0.001 in 1 million for the Worker. The maximum chronic HI was determined to be 0.000002 for the MEIW and 0.000002 for the MEIR.



Receptor Type	Maximum Cancer Risk (per million)	Maximum Acute HI	Maximum Chronic HI
MEIR			
Offsite Resident	0.01	0.0	2E-06
Child Care Center	0.01	0.0	1E-06
MEIW	< 0.001	0.0	2E-06
Threshold of Significance	10	1.0	1.0
Significant Impact?	No	No	No

Table 5Maximum Construction Health Impacts for All Receptors

Notes: HI= Hazard Index; MEIR = Maximally Exposed Individual Resident; MEIW = Maximally Exposed Individual Worker

Source: Estimated by AECOM in 2015

As shown in Table 5, the maximum health risks would not exceed 10 in 1 million. Therefore, the construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations that would result in a health risk. The impact would be less than significant.

Operation

The land uses associated with the proposed project would be commercial and recreational consistent with the existing conditions and are not typically sources of TAC emissions. Operation of the proposed project would primarily involve gasoline-fueled vehicles associated with worker and visitor commutes. No stationary sources of TAC emissions are anticipated to be located on the project site during long-term operation. Therefore, the proposed project's long-term operational activities would not generate substantial TAC emissions and would not expose sensitive receptors to substantial operational TAC concentrations. The impact would be less than significant.

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

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature.

Operation of the proposed project would not add any new odor sources. The project would not have any significant odor sources, and any odors generated would be similar to odors associated with the existing land uses. As a result, the proposed project's construction and operational activities would


not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHG), play a critical role in determining the earth's surface temperature. A portion of the solar radiation that enters earth's atmosphere is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the earth's atmosphere; as a result, infrared radiation released from the earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Without the naturally occurring greenhouse effect, Earth would not be able to support life as we know it.

GHGs are present in the atmosphere naturally, are released by natural and anthropogenic sources, and are formed from secondary reactions taking place in the atmosphere. Natural sources of GHGs include the respiration of humans, animals and plants, decomposition of organic matter, and evaporation from the oceans. Anthropogenic sources include the combustion of fossil fuels, waste treatment, and agricultural processes.

Carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) are the GHGs that that are widely accepted as the principal contributors to human-induced global climate change and would be generated by the proposed project. The majority of CO₂ emissions are byproducts of fossil fuel combustion. CH₄ is the main component of natural gas and is associated with agricultural practices and landfills. N₂O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2 . The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2 , the most abundant GHG. GHGs with lower emissions rates than CO_2 may still contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP). The concept of CO_2 -equivalents (CO_2e) is used to account for the different GWP potentials of GHGs to absorb infrared radiation.

Total construction-related GHG emissions were estimated using the same methodology to estimate criteria pollutant emissions discussed earlier. Total project construction emissions would be approximately 1,128 metric tons (MT) of CO₂e. SCAQMD recommends that construction emissions be amortized over 30 years, which is assumed to be the average lifetime of a project's operations, and added to the operational emissions of the project. When this total is amortized over the 30-year life of the project, annual construction emissions would be approximately 38 MT CO₂e per year.

The SCAQMD has only adopted a significance threshold of 10,000 MT of CO₂ per year for industrial projects (SCAQMD 2008). The GHG CEQA Significance Threshold Stakeholder Working Group recommended options for evaluating non-industrial projects including thresholds for residential, commercial, and mixed use projects (SCAQMD 2009). The draft thresholds released by the SCAQMD include a threshold of 3,000 MT CO₂e per year for all of those lands use types. At the time of this analysis, these draft thresholds have not been adopted by the SCAQMD. Since the proposed project would include commercial and recreational land uses, the proposed SCAQMD threshold of



 $3,000 \text{ MT CO}_2$ e per year will be used for this analysis. Table 6 summarizes the proposed operational emissions and amortized construction GHG emissions.

Year	Total
2016	131
2017	422
2018	575
Total	1,128
Amortized Construction Emissions	38

Table 6
Construction-Related GHG Emissions (MT CO ₂ e/year)

MT $CO_2e =$ metric tons of carbon dioxide equivalent

Additional details available in Attachment A. Source: Modeled by AECOM in 2015

As shown in Table 6, the project-related GHG emissions are below the SCAQMD proposed threshold. Therefore, this impact would be less than significant.

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG?

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, requires that statewide GHG emissions be reduced to 1990 levels by 2020. ARB's Scoping Plan is the state's plan to achieve the GHG reductions in California required by AB 32 and also reiterates the state's role in the long-term goal established in Executive Order S-3-05, which is to reduce GHG emissions to 80% below 1990 levels by 2050.

ARB is required to update the Scoping Plan at least once every five years to evaluate progress and develop future inventories that may guide this process. ARB approved the first update to the Climate Change Scoping Plan: Building on the Framework in 2014 (ARB 2014). The Scoping Plan Update confirms that the state is on track to meet the 2020 emissions reduction target, but will need to maintain and build upon its existing programs, scale up deployment of clean technologies, and provide more low-carbon options to accelerate GHG emission reductions, especially after 2020, in order to meet the 2050 target. The Scoping Plan update did not directly create any regulatory requirements for construction of the proposed project. However, the Scoping Plan update includes recommended actions (e.g., Phase 2 heavy-duty truck GHG standard standards, enhance and strengthen the Low Carbon Fuel Standard) that would indirectly address GHG emissions from construction activities.

In May 2007, the City of Los Angeles released its Climate Action Plan (CAP), "Green LA: An Action Plan to Lead the Nation in Fighting Global Warming." The Plan sets forth a goal of reducing the City's greenhouse gas emissions to 35% below 1990 levels by the year 2030. The CAP is a voluntary plan that identifies over 50 action items, grouped into focus areas, to reduce emissions. ClimateLA is the implementation program that provides detailed information, including a context, lead departments, and a timeline for completion, for each action item discussed in the GreenLA CAP. Where possible, the ClimateLA program document includes potential CO2 emission reductions from full implementation of the measures.

The proposed project would be a reconstruction of existing land uses, and any building construction activities would be consistent with current Title 24 standards, which would improve energy efficiency of the buildings. Therefore, the proposed project would not conflict with the AB 32 Scoping Plan,



GreenLA CAP, or ClimateLA. As discussed earlier, the proposed project would also not generate GHG emissions that would have a significant impact on the environment. Therefore, the proposed project would not conflict with any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. This impact would be less than significant.



References

California Air Resources Board (CARB)

2014 First Update to the Climate Change Scoping Plan: Building on the Framework. Pursuant to AB 32, the California Global Warming Solutions Act of 2006. Available at http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_sc oping_plan.pdf. Accessed December 2015.

California Air Pollution Control Officers Association (CAPCOA)

2009 Health Risk Assessments for Proposed Land Use Projects. Available at http://www.capcoa.org/wpcontent/uploads/downloads/2010/05/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf. Accessed February 4, 2015.

South Coast Air Quality Management District (SCAQMD).

- 2008 Greenhouse Gases (GHG) CEQA Significance Thresholds. Available at <u>http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds</u>. Accessed December 2015.
- 2009 Greenhouse Gases (GHG) CEQA Significance Thresholds. Available at <u>http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-</u> <u>significance-thresholds</u>. Accessed December 2015.
- 2013 Air Quality Management Plan. Available at http://www.aqmd.gov/home/library/cleanair-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan. Accessed December 2015.
- 2015 SCAQMD Meteorological Data for AERMOD. Available at http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/datafor-aermod. Accessed November 24, 2015.
- U.S. Environmental Protection Agency (EPA)
 - 2015 AERMOD Implementation Guide (AIG). Office of Air Quality Planning and Standards, Research Triangle Park, NC. August. http://www.epa.gov/ttn/scram/7thconf/aermod/aermod_implmtn_guide_3August2015. pdf

APPENDIX B Biological Resources Search Results





Query Criteria:

Quad is (Beverly Hills (3411814) or Burbank (3411823) or Hollywood (3411813) or Inglewood (3311883) or Los Angeles (3411812) or Pasadena (3411822) or South Gate (3311882) or Van Nuys (3411824) or Venice (3311884))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Anniella pulchra pulchra	ARACC01012	None	None	G3G4T3T4Q	S3	SSC
silvery legless lizard						
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
pallid bat						
Arenaria paludicola	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
marsh sandwort						
Aspidoscelis tigris stejnegeri	ARACJ02143	None	None	G5T3T4	S2S3	
coastal whiptail						
Astragalus brauntonii	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Braunton's milk-vetch						
Astragalus pycnostachyus var. lanosissimus	PDFAB0F7B1	Endangered	Endangered	G2T1	S1	1B.1
Ventura Marsh milk-vetch						
Astragalus tener var. titi	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
coastal dunes milk-vetch						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Atriplex parishii	PDCHE041D0	None	None	G1G2	S1	1B.1
Parish's brittlescale					_	_
Atriplex serenana var. davidsonii	PDCHE041T1	None	None	G5T1	S1	1B.2
Davidson's saltscale				_	_	_
Berberis nevinii	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
					0.400	
Brennania belkini	IIDIP17010	None	None	G1G2	S1S2	
		News	There is a start of the	05	00	
Swainson's bawk	ABNKC19070	None	Inreatened	G5	53	
		None	None	C 22	600	4D 0
round-leaved filaree	PDGER01070	None	None	63?	53?	10.2
California Walnut Woodland		None	None	62	S2 1	
California Walnut Woodland	011712100A	None	None	02	02.1	
Calochortus clavatus var gracilis		None	None	G4T2T3	\$2\$3	1B 2
slender mariposa-lilv		Nono		011210	0200	10.2
Calochortus plummerae	PMLIL0D150	None	None	G4	S4	4.2
Plummer's mariposa-lily					•	
Calvstegia felix	PDCON040P0	None	None	GHQ	SH	3.1
lucky morning-glory						
Carolella busckana	IILEM2X090	None	None	G1G3	SH	
Busck's gallmoth						





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Centromadia parryi ssp. australis	PDAST4R0P4	None	None	G3T2	S2	1B.1
southern tarplant						
Chaenactis glabriuscula var. orcuttiana	PDAST20095	None	None	G5T1T2	S1	1B.1
Orcutt's pincushion						
Charadrius alexandrinus nivosus	ABNNB03031	Threatened	None	G3T3	S2	SSC
western snowy plover						
Chenopodium littoreum	PDCHE091Z0	None	None	G2	S2	1B.2
coastal goosefoot						
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Chorizanthe parryi var. fernandina	PDPGN040J1	Candidate	Endangered	G2T1	S1	1B.1
San Fernando Valley spineflower			Ū			
Chorizanthe parryi var. parryi	PDPGN040J2	None	None	G3T3	S3	1B.1
Parry's spineflower						
Cicindela hirticollis gravida	IICOL02101	None	None	G5T2	S1	
sandy beach tiger beetle						
Cicindela senilis frosti	IICOL02121	None	None	G2G3T1T3	S1	
senile tiger beetle						
Coccyzus americanus occidentalis	ABNRB02022	Threatened	Endangered	G5T3Q	S1	
western yellow-billed cuckoo						
Coelus globosus	IICOL4A010	None	None	G1G2	S1S2	
globose dune beetle						
Danaus plexippus pop. 1	IILEPP2012	None	None	G4T2T3	S2S3	
monarch - California overwintering population						
Dithyrea maritima	PDBRA10020	None	Threatened	G2	S1	1B.1
beach spectaclepod						
Dodecahema leptoceras	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
slender-horned spineflower				_	_	_
Dudleya multicaulis	PDCRA040H0	None	None	G2	S2	1B.2
many-stemmed dudleya				0.770	<i></i>	
Empidonax traillii extimus	ABPAE33043	Endangered	Endangered	G5T2	S1	
southwestern willow hycatcher				0004	00	
Emys marmorata	ARAAD02030	None	None	G3G4	53	550
		Endengered	Fodoogorod	0574	64	10.4
Eryngium aristulatum var. parisnii San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G511	51	1B.1
		Nono	Nono	C1	C1	
Henne's eucosman moth	ILE MORSSO	None	None	GI	51	
		None	None	G5T4	6364	SSC
western mastiff bat		NUIG		0014	0004	000
Funhilotes battoides allvni	III EPG201B	Endangered	None	G5T1	S1	
El Segundo blue butterfly		gorou				





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
Falco peregrinus anatum	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
American peregrine falcon						
Helianthus nuttallii ssp. parishii	PDAST4N102	None	None	G5TH	SH	1A
Los Angeles sunflower						
Horkelia cuneata var. puberula	PDROS0W045	None	None	G4T1	S1	1B.1
mesa horkelia						
Lasionycteris noctivagans	AMACC02010	None	None	G5	S3S4	
silver-haired bat						
Lasiurus cinereus	AMACC05030	None	None	G5	S4	
hoary bat						
Lasiurus xanthinus	AMACC05070	None	None	G5	S3	SSC
western yellow bat						
Lasthenia glabrata ssp. coulteri	PDAST5L0A1	None	None	G4T2	S2	1B.1
Coulter's goldfields						
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3G4T1	S1	FP
California black rail						
Lepidium virginicum var. robinsonii	PDBRA1M114	None	None	G5T3	S3	4.3
Robinson's pepper-grass						
Malacothamnus davidsonii	PDMAL0Q040	None	None	G2	S2	1B.2
Davidson's bush-mallow						
Microtus californicus stephensi	AMAFF11035	None	None	G5T1T2	S1S2	SSC
south coast marsh vole						
Nama stenocarpa	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
mud nama						
Nasturtium gambelii	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
		T hus a factor of	News	00	00	45.4
Navarretia tossalis	PDPLM0C080	Inreatened	None	G2	52	1B.1
		Nana	Neze	63	C 0	
navarretia prostrata	PDPLMUCUQU	None	None	G2	52	1 B .1
		Nono	Nono	057274	6264	880
San Diego desert woodrat	AIVIAFF00041	None	NONE	651514	3334	330
Nyctinomons femorosaccus		None	None	C4	63	SSC
pocketed free-tailed bat		None	NULE	04	00	000
Nyctinomons macrotis		None	None	65	53	SSC
big free-tailed bat	/ (()/ (020+020	None	None	00	00	000
Onvchobaris langei	IICOI 4W010	None	None	G1	S1	
Lange's El Segundo Dune weevil						
Onvchomvs torridus ramona	AMAFF06022	None	None	G5T3	S3	SSC
southern grasshopper mouse						
Orcuttia californica	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
California Orcutt grass		0	5			





Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
Panoquina errans	IILEP84030	None	None	G4G5	S2	
wandering (=saltmarsh) skipper						
Passerculus sandwichensis beldingi	ABPBX99015	None	Endangered	G5T3	S3	
Belding's savannah sparrow						
Pelecanus occidentalis californicus	ABNFC01021	Delisted	Delisted	G4T3	S3	FP
California brown pelican						
Perognathus longimembris brevinasus	AMAFD01041	None	None	G5T1T2	S1S2	SSC
Los Angeles pocket mouse						
Perognathus longimembris pacificus	AMAFD01042	Endangered	None	G5T1	S1	SSC
Pacific pocket mouse						
Phacelia stellaris	PDHYD0C510	None	None	G1	S1	1B.1
Brand's star phacelia						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast horned lizard						
Polioptila californica californica	ABPBJ08081	Threatened	None	G3T2	S2	SSC
coastal California gnatcatcher						
Potentilla multijuga	PDROS1B120	None	None	GX	SX	1A
Ballona cinquefoil						
Pseudognaphalium leucocephalum	PDAST440C0	None	None	G4	S2	2B.2
white rabbit-tobacco						
Quercus dumosa	PDFAG050D0	None	None	G3	S3	1B.1
Nuttall's scrub oak						
Rana muscosa	AAABH01330	Endangered	Endangered	G1	S1	SSC
southern mountain yellow-legged frog						
Ribes divaricatum var. parishii	PDGRO020F3	None	None	G4TH	SH	1A
Parish's gooseberry						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Riversidian Alluvial Fan Sage Scrub						
Sidalcea neomexicana	PDMAL110J0	None	None	G4	S2	2B.2
Salt Spring checkerbloom						
Socalchemmis gertschi	ILARAU7010	None	None	G1	S1	
Gertsch's socalchemmis spider						
Sorex ornatus salicornicus	AMABA01104	None	None	G5T1?	S1	SSC
southern California saltmarsh shrew						
Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coast Live Oak Riparian Forest						
Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Coastal Salt Marsh						
Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Cottonwood Willow Riparian Forest						





						Rare Plant Rank/CDFV
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
Southern Dune Scrub						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Sternula antillarum browni	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California least tern						
Streptocephalus woottoni	ICBRA07010	Endangered	None	G1G2	S1S2	
Riverside fairy shrimp						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster						
Symphyotrichum greatae	PDASTE80U0	None	None	G3	S3	1B.3
Greata's aster						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Trigonoscuta dorothea dorothea	IICOL51021	None	None	G1T1	S1	
Dorothy's El Segundo Dune weevil						
Tryonia imitator	IMGASJ7040	None	None	G2	S2	
mimic tryonia (=California brackishwater snail)						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S2	
least Bell's vireo						
Walnut Forest	CTT81600CA	None	None	G1	S1.1	
Walnut Forest						

Record Count: 94

		Rare		
		Plant	State Listing	Federal Listing
Scientific Name	Common Name	Rank	(CESA)	(FESA)
Abronia maritima	red sand-verbena	4.2	None	None
Arenaria paludicola	marsh sandwort	1B.1	Endangered	Endangered
Asplenium vespertinum	western spleenwort	4.2	None	None
Astragalus brauntonii	Braunton's milk-vetch	1B.1	None	Endangered
Astragalus pycnostachyus var. Ianosissimus	Ventura marsh milk-vetch	1B.1	Endangered	Endangered
Astragalus tener var. titi	coastal dunes milk-vetch	1B.1	Endangered	Endangered
Atriplex parishii	Parish's brittlescale	1B.1	None	None
Atriplex serenana var. davidsonii	Davidson's saltscale	1B.2	None	None
Berberis nevinii	Nevin's barberry	1B.1	Endangered	Endangered
California macrophylla	round-leaved filaree	1B.2	None	None
Calochortus catalinae	Catalina mariposa lily	4.2	None	None
Calochortus clavatus var. gracilis	slender mariposa lily	1B.2	None	None
Calochortus plummerae	Plummer's mariposa lily	4.2	None	None
Calystegia felix	lucky morning-glory	3.1	None	None
Camissoniopsis lewisii	Lewis' evening-primrose	3	None	None
Centromadia parryi ssp. australis	southern tarplant	1B.1	None	None
Chaenactis glabriuscula var.	Orcutt's pincushion	1B.1	None	None
orcuttiana	P			
Chenopodium littoreum	coastal goosefoot	1B.2	None	None
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	1B.2	Endangered	Endangered
Chorizanthe parryi var. fernandina	San Fernando Valley	1B.1	Endangered	Candidate
Chorizanthe parryi yar, parryi	Parry's spineflower	1B.1	None	None
Clinopodium mimuloides	monkey-flower sayory	4.2	None	None
Convolvulus simulans	small-flowered morning-glory	4.2 4.2	None	None
		7.2	None	None
Deinandra paniculata	paniculate tarplant	4.2	None	None
Dichondra occidentalis	western dichondra	4.2	None	None
Dithyrea maritima	beach spectaclepod	1B.1	Threatened	None
Dodecahema leptoceras	slender-horned spineflower	1B.1	Endangered	Endangered
Dudleya multicaulis	many-stemmed dudleya	1B.2	None	None
Eryngium aristulatum var. parishii	San Diego button-celery	1B.1	Endangered	Endangered
Erysimum insulare	island wallflower	1B.3	None	None
Erysimum suffrutescens	suffrutescent wallflower	4.2	None	None
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	1A	None	None
Hordeum intercedens	vernal barley	3.2	None	None
Horkelia cuneata var. puberula	mesa horkelia	1B.1	None	None
Juglans californica	Southern California black walnut	4.2	None	None

		Rare		
		Plant	State Listing	Federal Listing
Scientific Name	Common Name	Rank	(CESA)	(FESA)
Juncus acutus ssp. leopoldii	southwestern spiny rush	4.2	None	None
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	1B.1	None	None
Lepechinia fragrans	fragrant pitcher sage	4.2	None	None
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	4.3	None	None
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	4.2	None	None
Linanthus concinnus	San Gabriel linanthus	1B.2	None	None
Malacothamnus davidsonii	Davidson's bush-mallow	1B.2	None	None
Nama stenocarpa	mud nama	2B.2	None	None
Nasturtium gambelii	Gambel's water cress	1B.1	Threatened	Endangered
Navarretia fossalis	spreading navarretia	1B.1	None	Threatened
Navarretia prostrata	prostrate vernal pool navarretia	1B.1	None	None
Orcuttia californica	California Orcutt grass	1B.1	Endangered	Endangered
Phacelia hubbyi	Hubby's phacelia	4.2	None	None
Phacelia ramosissima var.	south coast branching phacelia	3.2	None	None
austrolitoralis				
Phacelia stellaris	Brand's star phacelia	1B.1	None	Candidate
Potentilla multijuga	Ballona cinquefoil	1A	None	None
Pseudognaphalium leucocephalum	white rabbit-tobacco	2B.2	None	None
Quercus dumosa	Nuttall's scrub oak	1B.1	None	None
Quercus durata var. gabrielensis	San Gabriel oak	4.2	None	None
Quercus engelmannii	Engelmann oak	4.2	None	None
Ribes divaricatum var. parishii	Parish's gooseberry	1A	None	None
Romneya coulteri	Coulter's matilija poppy	4.2	None	None
Rupertia rigida	Parish's rupertia	4.3	None	None
Sidalcea neomexicana	salt spring checkerbloom	2B.2	None	None
Suaeda esteroa	estuary seablite	1B.2	None	None
Suaeda taxifolia	woolly seablite	4.2	None	None
Symphyotrichum defoliatum	San Bernardino aster	1B.2	None	None
Symphyotrichum greatae	Greata's aster	1B.3	None	None

California Native Plant Society, Rare Plant Program. 2015. Inventory of Rate and Endangered Plants (online edition, v8-02). Available at: http://www.rareplants.cnps.org [accessed September 30, 2015].

APPENDIX C Cultural Resources Assessment

DRAFT CULTURAL RESOURCES ASSESSMENT RANCHO CIENEGA SPORTS COMPLEX (CELES KING III POOL) PROJECT CITY OF LOS ANGELES, CALIFORNIA



Prepared for:

City of Los Ángeles James R. Tebbetts Environmental Management Group 1149 South Broadway, Suite 600, Mail Stop 939 Los Angeles, California 90015-2213

Prepared by:

AECOM 515 South Flower Street, 8th Floor Los Angeles, California 90071 *Authors:* Linda Kry, B.A. Marc A. Beherec, Ph.D., RPA M.K. Meiser, M.A.

January 2016

U.S.G.S. Quadrangle: Hollywood Acreage: Approximately 30

Keywords: Rancho Cienega Sports Complex, Celes King III Pool

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MANAGEMENT SUMMARY

The City of Los Angeles (City) proposes to develop a new sports complex in Council District 10 to address several operation needs as part of the Rancho Cienega Sports Complex Project (Project). The Project will be constructed utilizing a combination of federal and local funds, and is considered an undertaking under Section 106 of the National Historic Preservation Act (NHPA). Federal funding may include U.S. Department of Housing and Urban Development funding. The Department of Public Works, Bureau of Engineering is the lead agency. AECOM has been retained to conduct a cultural resources assessment in support of an Initial Study/Mitigated Negative Declaration, in compliance with the NHPA, National Environmental Policy Act, California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., the City's CEQA Guidelines (1981, amended July 31, 2002), State CEQA Guidelines, and the California Code of Regulations Section 15000 et seq. This report documents the cultural resources assessment in connection with the Project.

The records search revealed that 25 cultural resources investigations were previously conducted within 0.5-mile radius of the Project area of potential effects (APE). Twenty-four cultural resources, including five archaeological resources, 18 buildings, and one district were previously recorded within the study area of the Project APE, but none of these resources occur within the Project APE. One historic property that is listed in the National Register of Historic Places (NRHP) is adjacent to the Project APE. Five additional buildings that are listed as California Historical Landmarks are also located within the study area, but not located in the Project APE.

A letter requesting a Sacred Lands File check was conducted by the Native American Heritage Commission with negative results. Letters were sent to 10 interested Native American parties.

A cultural resources field survey of the Project APE was conducted on October 1, 2015. No archaeological resources were identified. The Rancho Cienega Sports Complex, including four buildings and/or structures, was observed and recorded on Department of Parks and Recreation 523 series forms. These resources were evaluated for their eligibility for listing in the NRHP and the California Register of Historical Resources (CRHR).

One resource, the Celes King III Pool, is significant under NRHP Criterion C for local significance, and CRHR Criterion 3 for its distinctive modern design for a civic building in Los Angeles, and is considered a historic property under NEPA and NHPA and a historical resources under CEQA. The Project would not demolish the building or alter the characteristics of the pool building that contribute to its eligibility.

Because the Project would be constructed in an area with known prehistoric and historic archaeological and paleontological sensitivity, prehistoric and/or historic archaeological resources and paleontological resources may be present within the Project APE. Such resources may lie beneath the surface obscured by pavement or vegetation. Because of the potential to encounter buried resources, archaeological and paleontological monitoring is recommended during ground-disturbing activities in areas of archaeological and paleontological sensitivity.

INTRODUCTION

The City of Los Angeles (City) proposes to develop a new sports complex in Council District 10 to address several operation needs as part of the Rancho Cienega Sports Complex Project (Project). The Project will be constructed utilizing a combination of federal and local funds, and is considered an undertaking under Section 106 of the National Historic Preservation Act (NHPA). Federal funding may include U.S. Department of Housing and Urban Development funding. The Department of Public Works, Bureau of Engineering is the lead agency. AECOM has been retained to conduct a cultural resources assessment in support of an Initial Study/Mitigated Negative Declaration, in compliance with the NHPA, National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., the City's CEQA Guidelines (1981, amended July 31, 2002), State CEQA Guidelines, and the California Code of Regulations Section 15000 et seq. This report documents the cultural resources assessment in connection with the Project.

PROJECT LOCATION AND DESCRIPTION

The Project is located approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community Plan Area and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (Figure 1). The Project area is within the Rancho Cienega Sports Complex, located at 5001 Rodeo Road (Figure 2). Land use in the vicinity of the Project area is highly urbanized, dominated by residential housing, light industrial and commercial use, and public lands. The 30-acre regional park is bounded by the Los Angeles County Metropolitan Transportation Authority (Metro) Expo Line light rail transit to the north, Dorsey High School to the east, residential housing to the south, and commercial uses to the west (Figure 3).

The Project would be implemented in two phases. Phase 1 includes demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. In addition, several buildings would be constructed during Phase 1 and include a new pool and bath house, including a community room and fitness annex on the second floor, and would total approximately 25,000 square feet. A new gymnasium, including office space, a running path, and a lookout deck on the second floor, would be approximately 24,000 square feet. A new tennis shop and overlook would be approximately 1,900 square feet. Additionally, a stadium overlook would include a concession stand, restrooms, and a ticket booth, totaling 4,000 square feet.

Phase 2 of the Project consists of demolition and hazardous materials abatement of an existing maintenance building, grading for off-street parking areas and new maintenance yard and refuse collection center, utility adjustments and necessary upgrades, construction of the new maintenance yard and refuse collection center and various site improvements, installation of new driveways, a new community garden, and installation of landscaping and hardscaping.

Exclusive of pile driving, excavations for this Project are anticipated to reach a maximum depth of 16 feet.



Scale: 1:633,600
Cultural Resources Assessment Rancho Cienega Sports Complex Project
Path: \\USLA1FS002\pdd_prod\Projfile\2015\60440382_LABOE_RanchoCienega\400 - Technical\Cultural\GIS\Layout\Fig1_LABOE_RanchoCienega_Regional_20150928.mxd, 1021/2015, Aziz_Bakkoury



Cultural Resources Assessment Rancho Cienega Sports Complex Project

Path: \\USLA1FS002\pdd_prod\Projfile\2015\60440382_LABOE_RanchoCienega\400 - Technical\Cultural\GIS\Layout\Fig2_LABOE_RanchoCienega_Project_Location_20150928.mxd, 10/21/2015, Aziz_Bakkoury



Construction is anticipated to begin in fourth quarter 2016 and is expected to last for 2.5 years, ending in early 2019. Phase 1 is anticipated to take approximately 17 months to complete, and Phase 2 is anticipated to take 10 months to complete.

Construction of the Phase 1 and Phase 2 would include the following components:

- 1. Demolition of the existing restroom facility and construction of a new indoor pool and bathhouse.
- 2. Demolition of the existing gymnasium and construction of a new gymnasium and fitness annex.
- 3. Demolition of the existing tennis shop and playground, and construction of a new tennis shop with an overlook. A new playground will be constructed.
- 4. Landscaping around the new facilities, installation of security lighting around the new facilities, and upgrades to the parking lot along Rodeo Drive.
- 5. Rehabilitation and expansion of the existing Los Angeles Department of Recreation and Parks' Maintenance Building, located adjacent to the northwest corner of Robinson Stadium.
- 6. Landscaping the remainder of the park and installation of storm water and drainage infrastructure in the park.
- 7. Installing a new driveway along the northwest property line and upgrading existing off-street parking area at the rear of the property adjacent to the Metro Expo Rail line, creating a community garden, and constructing a joint use multi-use field and off-street parking area.
- 8. Installing a new controlled driveway at the southwest property line near the Robinson Stadium and additional off-street parking along the western property line.
- 9. Construction of a new stadium overlook adjacent to the eastern perimeter of the existing stadium. The stadium overlook would include a concession stand, additional restrooms, and a ticket office, totaling approximately 4,000 square feet.

Construction of the proposed project would entail the delivery of building materials such as concrete, lumber, landscaping materials, etc. Construction staging of equipment and materials would occur within a portion of the primary parking lot along Rodeo Road and the overflow parking lot at the rear of the complex off of Exposition Boulevard. Trucks delivering construction equipment and materials to the project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the project site. Alternatively, trucks carrying demolition debris from the project site would travel from the project site, west on Rodeo Road, and north on La Brea Avenue to I-10. Construction workers would park in the rear parking lot off of Exposition Boulevard to ensure parking is available for park patrons.

PROJECT PERSONNEL

AECOM personnel involved in the cultural resources assessment are as follows: Christy Dolan, M.A., RPA, provided senior review; Linda Kry, B.A., served as report author, conducted archival research, and conducted archaeological and built environment surveys; Marc A. Beherec, Ph.D., RPA, conducted archival research and served as report author; M.K. Meiser, M.A., evaluated built resources and served as report author; Kyle Griffith, B.A., provided geographic information system (GIS) support and conducted archaeological survey; Allison Hill, B.A., conducted Native American contact; Maria Wiseman, M.A., RPA, conducted built environment survey; and Alec Stevenson provided GIS support. Resumes of key personnel are included in Appendix A.

REPORT ORGANIZATION

The organization of this report includes the following sections:

- Introduction, including a description of the Project and its location, report personnel, and report organization;
- Setting, including a description of the environmental and cultural settings and a detailed history of the Project area;
- Research, including the results of archival research, Native American contact program, and a paleontological records check;
- Methods, describing survey methodology;
- Results, including the results of the field survey; and
- Evaluation and Management Recommendations, which summarizes the cultural resources assessment and provides management recommendations.

SETTING

ENVIRONMENTAL SETTING

The Project area is located in the western Los Angeles Basin, which is formed by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The basin was formed by alluvial and fluvial deposits derived from these surrounding mountains. The floodplain forest of the Los Angeles Basin formed one of the most biologically rich habitats in Southern California. Willow, cottonwood, and sycamore trees, and a dense underbrush of alder, hackberry, and shrubs once lined the Los Angeles River. The river meandered its way west through present-day Ballona Creek and emptied out into the Santa Monica Bay until 1825. As the river coursed its way west through a narrow path between Baldwin Hills and Cheviot Hills, it would overflow and create mud flats and lagoons, which came to be known as the Ballona Wetlands, a rich habitat for wildlife (Gumprecht 1999). Ballona Creek is located less than 2 miles east of the Project area and flows in a southwestern direction. Vegetation within the Project area is largely composed of nonnative ornamental plant species. The Baldwin Hills to the south of the Project area are dominated by coastal sage brush plant community, including scrub oak, California sage brush, black and white sages, and herbaceous plants and grasses. Today, the Project area is located within an urban setting at a maximum elevation of approximately 103 feet above sea level.

CULTURAL SETTING

As a framework for discussing the potential cultural resources that may exist in the study area, the following discussion summarizes the current understanding of major prehistoric and historic developments in and around Los Angeles and provides a more focused discussion of the history of the Project area itself.

Prehistoric Overview

The earliest evidence of occupation in the Los Angeles area dates to at least 9,000 years before present (B.P.) and is associated with a period known as the Millingstone Cultural Horizon (Wallace 1955; Warren 1968). Departing from the subsistence strategies of their nomadic big-game hunting predecessors, Millingstone populations established more permanent settlements. These settlements were located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources including seeds, fish, shellfish, small mammals, and birds were exploited. Early Millingstone occupations are typically identified by the presence of handstones (manos) and millingstones (metates), while those Millingstone occupations dating later than 5,000 years B.P. contain a mortar and pestle complex as well, signifying the exploitation of acorns in the region.

Although many aspects of Millingstone culture persisted, by 3,500 years B.P. a number of socioeconomic changes occurred (Erlandson 1994; Wallace 1955; Warren 1968). These changes are associated with the period known as the Intermediate Horizon (Wallace 1955). Increased

populations in the region necessitated the intensification of existing terrestrial and marine resources (Erlandson 1994). This was accomplished in part through the use of the circular shell fishhook on the coast, and more abundant and diverse hunting equipment. Evidence for shifts in settlement patterns has been noted at a variety of locations at this time and is seen by many researchers as reflecting increasingly territorial and sedentary populations. The Intermediate Horizon marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and nonutilitarian materials were acquired, and travel routes were extended. Archaeological evidence suggests that the margins of numerous rivers, marshes, and swamps within the Los Angeles River Drainage served as ideal locations for prehistoric settlement during this period. These well-watered areas contained a rich collection of resources and are likely to have been among the more heavily traveled routes.

The Late Prehistoric period, from approximately 1,500 years B.P. to the mission era, is the period associated with the florescence of the contemporary Native American group known as the Gabrielino (Wallace 1955). Coming ashore near Malibu Lagoon or Mugu Lagoon in October of 1542, Juan Rodriguez Cabrillo was the first European to make contact with the Gabrielino Indians. Occupying the southern Channel Islands and adjacent mainland areas of Los Angeles and Orange Counties, the Gabrielino are reported to have been second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism (Bean and Smith 1978). The Gabrielino are estimated to have numbered around 5,000 in the pre-contact period (Kroeber 1925) and maps produced by early explorers indicate that at least 26 Gabrielino villages were within proximity to known Los Angeles River courses, while an additional 18 villages were reasonably close to the river (Gumprecht 1999). Other villages have been found to occupy several locations besides the marshes that bordered present-day Ballona Creek (Gumprecht 1999). Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game were hunted with deadfalls, rabbit drives, and by burning undergrowth, while larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939 [1852]). The primary plant resources were acorns, gathered in the fall and processed with mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939 [1852]).

Historic Overview

The *Gabrielino* were virtually ignored between the time of Cabrillo's visit and the Spanish Period, which began in 1769 when Gaspar de Portola and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. Passing through the Los Angeles area, they reached the San Gabriel Valley on August 2 and traveled west through a pass between two hills where they encountered the Los Angeles River and camped on its east bank near the present-day North Broadway Bridge and the entrance to Elysian Park. Father Crespi (a member of Portola's party) indicated in his diaries that on that day they "entered a spacious valley, well grown with cottonwoods and alders, among which ran a beautiful river. This plain where the river runs is very extensive and…is the most suitable site for a large settlement" (The River Project 2001). He goes on to describe this "green, lush valley"; its "very full flowing, wide river"; the "riot of color" in the hills; and the abundance of native grapevines, wild roses, grizzly, antelope, quail and steelhead trout. Crespi observed that the soil was rich and "capable of supporting every kind of grain and fruit which may be planted." The river was

named *El Rio y Valle de Nuestra Senora la Reina de Los Angeles de la Porciuncula*. Portola and his men continued their travels west before stopping for the night on August 3, and camped east of present-day La Brea Boulevard between Venice and Washington Boulevards, beside "an exceedingly copious spring" believed to be the location of present-day Ballona Creek (Gumprecht 1999).

Gabrielino villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of downtown, known as the Glendale Narrows, and those areas along the river's various outlets into the sea. *Gabrielino* villages were reported as bordering the river in several locations along present-day Ballona Creek but the names of these villages are unknown (Gumprecht 1999).

Missions were established in the years that followed the Portola expedition, the fourth being the Mission San Gabriel Archangel founded in 1771 near the present-day city of Montebello, approximately 7.5 miles east of the Project area. By the early 1800s, the majority of the surviving *Gabrielino* population had entered the mission system. The Gabrielino inhabiting Los Angeles County were under the jurisdiction of either Mission San Gabriel or Mission San Fernando. Mission life offered the Indians security in a time when their traditional trade and political alliances were failing and epidemics and subsistence instabilities were increasing (Jackson 1999).

On September 4, 1781, which was 12 years after Crespi's initial visit, the *Pueblo de la Reina de los Angeles* was established not far from the site where Portola and his men camped. Watered by the river's ample flow and the area's rich soils, the original pueblo occupied 28 square miles and consisted of a central square, surrounded by 12 houses, and a series of 36 agricultural fields occupying 250 acres, plotted to the east between the town and the river (Gumprecht 1999).

An irrigation system that would carry water from the river to the fields and the pueblo was the community's first priority and was constructed almost immediately. The main irrigation ditch, or *Zanja Madre*, was completed by the end of October 1781. It was constructed in the area of present-day Elysian Park and carried water south (roughly parallel to what is currently Spring Street) to the agricultural lands situated just east of the pueblo (Gumprecht 1999).

By 1786, the flourishing pueblo attained self-sufficiency and funding by the Spanish government ceased (Gumprecht 1999). Fed by a steady supply of water and an expanding irrigation system, agriculture and ranching grew, and by the early 1800s the pueblo produced 47 cultigens. Among the most popular were grapes used for the production of wine (Gumprecht 1999). Vineyards blanketed the landscape between present-day San Pedro Street and the Los Angeles River. By 1830, an estimated 100,000 vines were being cultivated at 26 Los Angeles vineyards. Over 8,300 acres of land were being irrigated by the *zanjas* during the 1880s (Gumprecht 1999).

The authority of the California missions gradually declined, culminating with their secularization in 1834. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its converts, the majority of these holdings quickly fell into non-Indigenous hands. Mission buildings were abandoned and quickly fell into decay. If mission life was difficult for Native Americans, secularization was typically worse. After two generations of dependence on the missions, they were suddenly disenfranchised. After secularization, "nearly all of the Gabrielinos went north while those of San Diego, San Luis, and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required" (Reid 1977 [1851]:104).

The first party of U.S. immigrants arrived in Los Angeles in 1841, although surreptitious commerce had previously been conducted between Mexican California and residents of the United States and its territories. Included in this first wave of immigrants were William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large, the Mexican government increased the number of land grants in an effort to keep the land in the hands of upper-class *Californios* like the Domínguez, Lugo, and Sepúlveda families (Wilkman and Wilkman 2006:14–17). Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999). Having been established as a pueblo, property within Los Angeles could not be dispersed by the governor, and this task instead fell under the city council's jurisdiction (Robinson 1979).

The United States took control of California after the Mexican-American War of 1846, and seized Monterey, San Francisco, San Diego, and Los Angeles (then the state capital) with little resistance. Local unrest soon surfaced, and Los Angeles slipped from U.S. control in 1847. Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, which included California, Nevada, and Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. The conquered territory represented nearly half of Mexico's pre-1846 holdings. California joined the United States in 1850 as the 31st state (Wilkman and Wilkman 2006:15).

While the discovery of gold in Northern California in 1849 gave rise to the California gold rush, Los Angeles was where the first California gold was found. Francisco López had found several gold nuggets clinging to wild onion roots near the San Fernando Mission in 1842 (Guinn 1915; Workman 1935). The discovery of gold at Sutter's Mill in 1849 led to an enormous influx of people from others parts of the United States in the 1850s and 1860s; these "forty-niners" rapidly displaced the old rancho families. Southern California's prosperity in the 1850s was largely a result of the increased demand for cattle for meat and hides, which was created by the gold rush. Southern California was able to meet this need, and the local ranching community profited handsomely (Bell 1881:26).

Surrounded by miles of ranchos, Los Angeles was the center of a vibrant cattle industry throughout the 19th century. The city served as a trading hub for Southern California's "cow counties," and, at mid-century, the plaza was lined with the shops and town homes of ranch owners (Robinson 1979:243). In 1860, Los Angeles County had approximately 75,000 head of cattle, 14,000 horses, and 95,000 sheep. More than 55,000 bushels of wheat, 85,000 bushels of corn, and 209,000 pounds of wool were produced annually. The county accounted for approximately two-thirds of the state's wine output, producing almost 163,000 gallons in 1860. These agricultural pursuits were essential to the local economy.

When the Southern Pacific Railroad (SPRR) extended its line from San Francisco to Los Angeles in 1876, newcomers poured into Los Angeles and the population nearly doubled between 1870 and 1880. The completion of the second transcontinental line, the Atchison, Topeka & Santa Fe

(Santa Fe), took place in 1886 causing a fare war that drove fares to an unprecedented low. More settlers continued to head west and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities. The subdivision of the large ranchos took place during this time. The city's population rose from 11,000 in 1880 to 50,000 by 1890 (Meyer 1981:45).

The tremendous influx of people necessitated an increase in public transportation options, and, in the final years of the 19th century, passenger rail lines proliferated. Beginning with the Spring and Sixth Street Railway Company in 1873, dozens of rail lines appeared throughout the Los Angeles area. The Los Angeles Pacific Company began improving and extending interurban rail lines in earnest in 1906, creating impressive new switching stations and tunnels designed to shorten travel time and increase efficiency (Electric Railway Historical Association n.d.). The majority of these lines were subsequently incorporated into the Pacific Electric Company.

As a result of growing population and the increasing diversion of water, the once plentiful water supply provided by the Los Angeles River began to dwindle. The extensive floodplain dried up; the richly vegetated landscape had been cleared for construction materials and fuel; and the tens of thousands of head of cattle, horses, and sheep had decimated the local grasses. A number of waterworks projects were underway during the second half of the 19th century in an effort to increase water flow and water retention. These projects included the construction of Echo Park Reservoir, the Silver Lake Reservoir, and the further expansion of the *zanja* irrigation ditches. When these measures proved insufficient, a more permanent solution to Los Angeles' water shortage was sought. Under the direction of city engineer William Mulholland, the Los Angeles Bureau of Water Works and Supply constructed the 238-mile-long Los Angeles Aqueduct. This 5-year project, completed in 1913, employed the labor of more than 5,000 men and brought millions of gallons of water into the San Fernando (now Van Norman) Reservoir (Gumprecht 1999). Now able to offer water and sewer service at a grand scale, many smaller cities were voluntarily incorporated by Los Angeles (Robinson 1979:244).

The beginning of the 20th century saw the expansion of the suburban metropolis, where a vast network of residential communities outgrew city centers with the single-family home and private space taking precedence over public space (Hawthorne 2006). Inexpensive automobiles gained popularity in the 1920s, soon creating tremendous congestion in the centers of cities and necessitating alternate transportation routes. Dozens of freeways were constructed in the post-World War II years, radically altering the character of Los Angeles by simultaneously dividing local neighborhoods and connecting outlying communities.

During the first three decades of the 20th century, more than two million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area. By 1945, Los Angeles had undertaken 95 annexations, expanding from a 28-square-mile agrarian pueblo into a densely populated city covering more than 450 square miles (Robinson 1979:245).

Rancho Cienega Sports Complex

In 1843, Governor Manuel Micheltorena granted Rancho La Cienega o Paso de la Tijera to Vicente Sanchez (Kielbasa 1997) (Plate 1). The grant took the first half of its name from the

swamps (*cienegas*) and a crossing (*paso*) over a ditch (*tijera*) located in the grant. The rancho was east of present-day La Cienega Boulevard and south of Exposition Boulevard, and included Baldwin Hills, Leimert Park, Ladera Heights, and Windsor Hill.

Sanchez died in 1846, and after the Treaty of Guadalupe Hidalgo in 1848, his heirs, including his grandson Tomas Sanchez, filed a claim for the grant to the Public Land Commission in 1852, as required by the Land Act of 1851. The land remained in the Sanchez family until 1875 (Plate 1).



Plate 1. Plat of the Rancho La Cienega o Pas de la Tijera, circa 1857 (Huntington Digital Library)

In 1875, the Los Angeles and Independence Railway opened along the border between Rancho La Cienega o Paso de la Tijera and Rancho Las Cienegas to the north (present-day Los Angeles Metropolitan Authority Exposition Line). The railroad spurred land speculation continuing development in the late 19th century. Along the railroad, the community of Palms was founded during the boom of 1887–1888 after the transcontinental railroads brought thousands of new settlers to Los Angeles (Robinson 1939). Eventually, as part of the Palms Annexation, the Project area was annexed by the City of Los Angeles on May 22, 1915 (City of Los Angeles 2013).

In 1875, Tomas Sanchez sold Rancho La Cienega o Paso de la Tijera to Francis Pliney Fisk Temple, Arthur J. Hutchinson, Henry Ledyard, and Daniel Freeman. Temple used the land as collateral to establish the Temple-Workman Bank, but when the bank failed in 1876, the land was forfeited to businessman and horse racing magnate Elias J. "Lucky" Baldwin. The western section of the rancho became Baldwin Hills, and the land was used to pasture sheep. Baldwin was also instrumental in the founding of Arcadia, California. Baldwin died in 1909 and his daughter Anita M. Baldwin inherited the land. In 1916, oil drilling began on the land (French 1970).
Born in 1876, Anita M. Baldwin was one of the wealthiest women in the United States after she inherited her wealth from her father (*Zanesville Signal* 1932) (Plate 2). She was a philanthropist, traveler, composer, and animal lover, and founded the Anita M. Baldwin Hospital for Babies in 1919 and presided over the Los Angeles Society for the Prevention of Cruelty to Animals (Gazzar 2012). In 1932, she announced her intention to sell all her holdings and to retire to Europe, because she was tired, "of worry and care incident to the management of the estate of her father, who was reputedly the largest landholder in California" (*Zanesville Signal* 1932).



Plate 2. Portrait of Anita M. Baldwin, 1927 (Arcadia Public Library)

A few years before her death in 1939, Anita M. Baldwin donated a 30-acre tract of the former Rancho La Cienega o Paso de la Tijera to the City's Department of Playground and Recreation. The tract was meant for the creation of "the largest playground in Southern California" (LAT 1936b), "with the objective of making it a great recreation center not only for the immediate neighborhood and district but for the entire city as well" (LAT 1936a). Original plans called for a football field with running track and bleachers; baseball and softball diamonds; tennis, handball, and horseshoe courts; croquet grounds; an archery range; volleyball and basketball courts; a community clubhouse; and a play area for small children (Plate 3). Proposed buildings included team dressing quarters, a field house, playground headquarters building, and service buildings (LAT 1936a). In addition, a swimming pool and bathhouse were planned for the complex. The cost of the first phase of the project was estimated to be \$139,646 and was financed by the Works Progress Administration (WPA) (LAT 1936c). The groundbreaking ceremony for the complex took place on November 10, 1936, with a gathering of over 300 people, including City officials and honored guests (LAT 1936a). At the same time, construction of the new Western

District (West Adams, present-day Dorsey) High School was planned immediately adjacent to the complex to the east (LAT 1936c).



Plate 3. Plan for new playground, 1936 (LAT 1936b)

By July 1937, the construction of "four tennis courts, two baseball diamonds with guard fences and bleachers, a large team athletic building and a field structure, a small children's play area with apparatus, sand boxes and pergolas, courts for volleyball, basketball, horseshoes, croquet, archery range, walks, drives and parking areas" was completed (LAT 1937a). For beautification of the site, 1,435 trees and shrubs were installed around the facility (LAT 1937b). At this time, additional improvements were proposed, including a complete sports stadium seating 6,000 people with a football and soccer field and running track, and eight more tennis courts, two more baseball fields with bleachers, parking areas, walkways, and other features, completing the plan for the site. The \$73,000 cost of the additional facilities would be shared between the WPA and the City. However, construction of the proposed pool, bathhouse, and community center was postponed: "Construction of these latter features will depend upon the speed of the residential development in the area surrounding the playground…" (LAT 1937a). At the time: "Rancho Cienega recreation center is considered one of the most important major units in the Playground and Recreation Department's system of playgrounds" (LAT 1937a).

In 1957, Los Angeles voters approved a \$39.5 million bond for parks and recreation, \$5 million of which was dedicated to municipal pools. Rancho Cienega pool was one of 15 new pools constructed with the money (Los Angeles Department of Recreation and Parks 2004). In 1960, the City Recreation and Park Commission opened bidding to construct the new indoor pool (LAT 1960).

Albert Criz (1907–1991) was chosen to design the building (Plate 4). Criz received his B.S. in Architecture from Armour Institute (now the Illinois Institute of Technology) in 1929 (Koyl 1962:144). By 1942, Criz was practicing in California, when he assisted architect William Pereira in designing a home for aged actors known as the Motion Picture Country House (LAT 1942). Criz's work was prolific and broad in scope. According to a listing in the *American Architects Directory*, his firm specialized in residential, commercial, industrial, religious, educational, recreational, health facilities, penal institutions, public buildings, and military structures (Koyl 1962:144). His principal works are listed as Atascadero State Hospital, San Luis Obispo (1954); Anaheim Memorial Hospital (1956); West Los Angeles County Courts Building (1957); Stoner Avenue Elementary School (1957); City Administration Building (1959); and 4032 Wilshire Office Building (1960).



Plate 4. Albert Criz (right), stands in a courtroom of Valley County Building, Van Nuys, which he designed (James 1955)

Other Criz designs for civic buildings include the Valley County Building in Van Nuys; the Jewish Community Building and library at 590 North Vermont Avenue; the Temple Beth Ami at 18449 Kittridge Street in Reseda; the International Ladies Garment Workers Union at 1130 S.

Maple Street; International Towers in Long Beach; West Valley Community Hospital at 5333 Balboa Boulevard in Encino; Doric Motor Hotel at 1020 South Figueroa Street; and Green Acres Hospital at 9750 Haskell Avenue, North Hills. In addition, Criz served as architect on additional buildings and alterations at North Hollywood High School. His residential work included homes in the luxury Royal Woods development in Sherman Oaks, and the more modest Mar Vista Gardens at the intersection of Inglewood Boulevard and Braddock Drive in Culver City. The Los Angeles Conservancy considers Mar Vista Gardens "among the best examples of quality, community-centric design in public housing" (Los Angeles Conservancy 2015a). Arguably Criz's most significant design work is the West Los Angeles Civic Center, including the West Los Angeles City Hall, the West Los Angeles Pedestrian Mall, the West Los Angeles Courts Building, and the parking facility at 1620 Butler Avenue (Terence 1964; LAT 1970, 1972, 1974). The Los Angeles Conservancy opines, "This civic center is a great example of Mid-Century Modern architecture in an institutional context, and serves as an intact reminder of Los Angeles' rapid postwar expansion" (Los Angeles Conservancy 2015b). The City Historic Resources Inventory has documented the West Los Angeles Civic Center Historic District and found it eligible for the National Register of Historic Places (NRHP) (SurveyLA 2012).

Criz designed the new Rancho Cienega pool with a distinctive modernist style, including diamond-shaped window panels on its south façade. The new pool was opened in June 1963 (LAT 1963). The heated pool was also the only covered municipal pool at the time and, therefore, the only municipal pool to remain open year-round (LAT 1965, 1967). In 1990, the Rancho Cienega pool was closed due to leaking and water circulation problems. It was not reopened until 1993, after \$250,000 in improvements, which included repainting; replacing broken windows and doors; and installing new filters, a heating system, and a dehumidifier (Harris 1992; Aubry 1993).

In 1998, following a proposal by Councilman Nathaniel N. Holden, the City Council voted to rename Rancho Cienega Park gymnasium for Lonnie Wilson, Jr., and its pool in honor of Celes King III. Wilson was a community activist. King was a past national president of the Professional Bail Agents of the United States, past president of the Los Angeles City Human Relations Commission and the Los Angeles NAACP, and former state chairman of the Congress of Racial Equality (*Los Angeles Sentinel* 1998; LAT 1998).

In 2001, Rancho Cienega Sports Complex was one of 10 parks to receive major improvements. The improvements were made as part of the Clean and Safe Spaces, or CLASS, program begun by Mayor Richard Riordan and continued by Mayor Kenneth K. Hahn (McGreevy 2001).

RESEARCH

The cultural resources investigation for this Project involved archival research, including a cultural resources records search, a paleontological records check, a search of Sacred Lands File, other background research, and a Native American Contact Program.

ARCHIVAL RESEARCH

Records Search

Archival research of the Project site was conducted by Linda Kry on September 29, 2015, at the South Central Coastal Information Center housed at California State University, Fullerton. The research focused on the identification of previously recorded cultural resources within a 0.5-mile radius of the Project area of potential effects (APE). The archival research involved review of cultural resources site records, historic maps, and historic site and building inventories. The NRHP database and listings for the California State Historic Resources Inventory (HRI), and the California Historical Landmarks (CHL) Register were examined to determine whether any resources in the study area were listed in or had been determined eligible for these registers. The California Point of Historical Interest, the California Register of Historical Resources (CRHR), and the City of Los Angeles Historic-Cultural Monuments (LAHCM) also were reviewed for resources located within the study area.

Previous Cultural Resources Investigation Reports

The records search revealed that 25 cultural resources investigations were previously conducted within a 0.5-mile radius of the Project APE (Table 1). These previous investigations include one report on the archaeology of Ballona Creek; one reconnaissance report; five Phase I reports; one publication about the Haverty Human Skeletons; one archaeological records search and impact evaluation report; a compilation of archaeological site information; a report on prehistoric Native American cultural sites in the Santa Monica Mountains; six evaluation and/or investigation reports; one survey report; three monitoring and/or treatment plan reports; two Historic Property Survey Reports (HPSRs); and one request for concurrence for no adverse effect report. The Project APE has not been previously surveyed.

Author	Report # (LA-)	Description	Date
Belous, Russell E. and Charles E. Rozaire	00751	Preliminary Report on the Archaeology of the La Ballona Creek Area, Los Angeles County	1950
Bonner, Wayne H.	07340	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate LA-467- 01 (EL-044-01) 5035 Coliseum Street, Los Angeles, Los Angeles County, California	2005

Table 1. Previous Surveys Conducted within the Study Area

Author	Report # (LA-)	Description	Date
Bonner, Wayne H.	*09202	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV112412C (Exposition Boulevard), 4801 Exposition Boulevard, Los Angeles, Los Angeles County, California	2007
Bonner, Wayne H. and Sarah A. Williams	10212	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate SV11242D (4826 W. Jefferson Monopole), 4826 West Jefferson Blvd, Los Angeles, Los Angeles County, CA	2009
Brooks, Sheilagh and Richard H. Brooks	02967	The Haverty Human Skeletons: Morphological, Depositional, and Geochronological Characteristics	1990
Buckham, Bonnie M.	03583	The Los Angeles Basin and Vicinity: A Gazetteer and Compilation of Archaeological Site Information	1974
Christy, Juliet L.	06407	Archaeological Investigation of Fire Station No. 94- Crenshaw Los Angeles, California	2002
Dillon, Brian D.	03501	Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management (NOS- NCOS) Project Los Angeles, California	1990
Farmer, Malcolm F.	00839	Preliminary Notes of an Archaeological Reconnaissance of Indian Camp Sites in the Baldwin Hills-Ballona Creek Region of Los Angeles County, California	1936
Foster, John M. and Dana Slawson	*04667	Historic Resource Evaluation Report Exposition Boulevard Right-of-way Regional Bikeway Project Los Angeles County, California	1999
Greenwood, Roberta S., Scott Savastio, and Peter Messick	*10506	Cultural Resources Monitoring: North Outfall Sewer – East Central Interceptor Sewer Project	2004
Horne, Melinda C.	*11409	Construction Phase Cultural Resources Monitoring and Treatment Plan for the City of Los Angeles North Outfall – East Central Interceptor Sewer Project	2000
King, Chester	03587	Prehistoric Native American Cultural Sites in the Santa Monica Mountains	1994
King, Phil V.	*08955	Final Report for Year Three Historical and Cultural Resources Survey of Los Angeles: Sylmar, Watts, Crenshaw, and Vermont/Slauson	1983
McKenna, Jeanette	*10762	An Architectural Evaluation of Buildings within the Dorsey High School Campus in Anticipation of Campus Improvements, Los Angeles, Los Angeles County, CA	2010
McKenna, Jeanette A.	*11070	A Cultural Resources Investigation and Architectural Evaluation of the Commercial Building at 5051 Rodeo Road, Los Angeles, Los Angeles Co., CA	2011
Robinson, Mark	*10860	Exposition Corridor Light Rail Transit Project Construction Phase Cultural Resources Monitoring and Treatment Plan	2007
Rogers, Leslie	11240	Exposition Light Rail Transit Project: Request for Concurrence on Finding of No Adverse Effect and Proposed De Minimis Impact Finding Under Section 4(f) of the DOT Act; Dorsey High School and Farmdale Avenue Station	2010

Author	Report # (LA-)	Description	Date
Slawson, Dana	*10574	Bridge Evaluation Report: Exposition Boulevard Right-of- way Regional Bikeway Project, Los Angeles County, California	1999
Slawson, Dana and John M. Foster	*10575	Historic Property Survey Report – Exposition Boulevard Right-of-way Regional Bikeway Project, Los Angeles County, California	1999
Starzak, Richard, Alma Carlisle, Gail Miller, Catherine Barner, and Jessica Feldman	*10887	Historic Property Survey Report for the North Outfall Sewer-East Central Interceptor Sewer, City of Los Angeles, County of Los Angeles, California	2001
Taniguchi, Christeen	08006	Historic Architectural Evaluation and Partial Section 106 Compliance for a Proposed Wireless Telecommunications Service Facility Located at 5142-5150 West Jefferson Boulevard in the City of Los Angeles, Los Angeles County, California	2005
Wlodarski, Robert J.	*02838	Results of a Phase 1 Archaeological Study for the Proposed East Central Interceptor Sewer [ecis] Project, East-west Alignment, Los Angeles County, California	1993
Wlodarski, Robert J.	*03019	Results of a Phase I Archaeological Study for the Proposed East Central Interceptor Sewer [ecis] Project, East-west Alignment, Los Angeles County, California	1994
Wlodarski, Robert J.	03090	Addendum Report: Results of a Phase 1 Archaeological Study New Construction Shaft Site for the Proposed East Central Interceptor Sewer [ecis] Project, East-west Alignment, Los Angeles County, California	1994

*Surveys adjacent to the Project APE.

Previously Recorded Cultural Resources

The records search also indicated that a total of 24 cultural resources have been previously recorded within the study area (0.5-mile radius of the Project APE) (Tables 2 and 3). This includes five archaeological sites, 18 buildings, and one district.

The archaeological resources consist of five prehistoric sites (Table 2). None of these archaeological sites occur within the Project APE.

Primary Number (P-19-)	Trinomial	Site Type	Time Period	Description
000070	CA-LAN-070	Seasonal Camp or Village Site	Prehistoric	Malcolm Farmer's Baldwin Hills Site No. 4. Artifacts include a mano, a metate fragment, a rock of unknown use, a worked schist, and other unidentifiable tools
000071	CA-LAN-071	Seasonal Camp or Village Site	Prehistoric	Malcolm Farmer's Baldwin Hills Site No. 5. Artifacts include manos, three metates, pestles, and a perforated cog stone
000072	CA-LAN-072	Seasonal Camp or Village Site	Prehistoric	Malcolm Farmer's Baldwin Hills Site No. 6. Artifacts include a fragment of a flat-bottomed mortar and one quartz rock
000073	CA-LAN-073	Seasonal Camp or Village Site	Prehistoric	Malcolm Farmer's Baldwin Hills Site No. 7. Artifacts include a chopper tool and some unidentifiable broken stone
000171	CA-LAN-171	Burial	Prehistoric	At least six human burials at depths between 19–23 feet below ground surface

 Table 2. Previously Recorded Archaeological Sites within the Study Area

Sites P-19-000070, P-19-000071, P-19-000072, and P-19-000073 are prehistoric seasonal camps or village sites located along the southern portion of the Southern Pacific Railroad/Pacific Electric Railway, at the southern fork of Ballona Creek and west of La Brea Avenue. Site P-19-000070 (Malcolm Farmer's Baldwin Hills Site No. 4) measures approximately 152 meters eastwest by 61 meters north-south and is referred to as Malcolm Farmer's Baldwin Hills Site No. 4. The site was recorded in 1950 and consists of a mano, a metate fragment, a rock of unknown use, a worked schist, and other unidentifiable tools. Site P-19-000071 (Malcolm Farmer's Baldwin Hills Site No. 5) measures approximately 152 meters east-west by 91 meters north-south and is located just southwest of site P-19-000070. The artifact assemblage consists of manos, three metates, pestles, and a perforated cog stone. Site P-19-000072 (Malcolm Farmer's Baldwin Hills Site No. 6) is located west of site P-19-000071 and measures approximately 152 meters eastwest by 61 meters north-south. This site consists of a fragment of a flat-bottomed mortar and one quartz rock. The fourth site, Site P-19-000073 (Malcolm Farmer's Baldwin Hills Site No. 7), is located east of site P-19-000072 and just west of La Brea Avenue and measures approximately 30 meters by 15 meters. The artifact assemblage for this site consists of a chopper tool and some unidentifiable broken stone.

According to the site records, all the sites described above were observed on a ridge of ground that is higher than the surrounding area and formed islands composed of peat bog when water in the surrounding area was at a low setting at an unknown time period. The site records also indicate that the sites may have been destroyed historically by housing development in the surrounding area. The associated site maps were provided by the owner of the land, Rozaire, a farmer whose property consisting of a ranch, was situated where the sites were identified. These sites are between 0.25 mile and 0.5 mile west of the Project APE.

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Site P-19-000171 consists of at least seven prehistoric human burials. According to archival records, the site was documented in 1950 and was discovered approximately one-third of a mile west of Crenshaw Boulevard, 300 yards south of the Pacific Electric tracks, and one-third of a mile southeast of Dorsey High School. The burials were uncovered approximately 19 to 23 feet below the ground surface. The site is situated approximately 0.5 mile southeast of the Project APE.

In addition to the archaeological resources listed in Table 2, the records search also indicated that 18 buildings and one district were previously recorded within 0.5 mile of the Project APE (Table 3). Of the 19 recorded built resources, nine are residential buildings, two are factories, one is a warehouse, one is an industrial building, one is a commercial building, one is a restaurant/auto body shop, two are schools, one is a railway system, and one is a district (Baldwin Hills Village). Two resources, the Dorsey High School (P-19-188894) and the SPRR (P-19-188984) are adjacent to the Project APE (see Table 3); however, none of the resources are located within the Project APE.

(P-19-)	Resource Name	Description	Date
170399	2611 Orange Drive	Cienega Elementary School	1940
170400	2838 Orange Drive	Residence	1905
174405	5300 Rodeo Road	Baldwin Hills Village; Village Green	1942
187434	5142-5144 West Jefferson Boulevard	Industrial Building	1946-1947
*188894	3537 Farmdale Avenue	Susan Miller Dorsey High School	1937-1961
*188984	Southern Pacific Railroad/Pacific Electric Railway	Other identifier: Los Angeles and Independence Railroad; Santa Monica Airline; Segment is located between the 1000 and 6000 blocks of Exposition Boulevard	1857-1987
189069	3417 Farmdale Avenue	Residence	1932
189070	3421 Farmdale Avenue	Residence	1946
189071	3424 Farmdale Avenue	Residence	1946
189072	3425 Farmdale Avenue	Residence	1946
189073	3430 Farmdale Avenue	Residence	1926
189074	3431 Farmdale Avenue	Residence	1941
189075	3433 Farmdale Avenue	Commercial	1946
189085	4522–4544 West Jefferson Boulevard	Restaurant/Auto Body Shop	1947
189086	4600 West Jefferson Boulevard	Warehouse	1952
189087	5112 West Jefferson Boulevard	Factory	1946
189088	5132 West Jefferson Boulevard	Factory	1948
189089	5162 West Jefferson Boulevard	Residence	1930
189492	2641 Hobart Avenue	Residence	1907

Table 3. Previously	Recorded Bu	ilt Resources	within	the Study Ar	ea
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*Adjacent to the Project APE.

P-Number

Historic Property Data File

The Directory of Properties in the Historic Property Data File identified five resources within the study area, but outside of the Project APE (Table 4). Two of the resources are listed in or eligible for listing in the NRHP and CRHR.

Primary Number (P-19-)	Historic Resource/Address	NRHP and CRHR Status	Date
188894	Dorsey High School; 3537 Farmdale Avenue	Determined eligible for NRHP; listed in CRHR	1938
-	4801 Exposition Boulevard	Determined ineligible for NRHP; not evaluated for CRHR	1956
-	5202 Exposition Boulevard	Determined ineligible for NRHP; not evaluated for CRHR	1947
-	3036 Farmdale Avenue	Determined ineligible for NRHP; not evaluated for CRHR	1925
174405	Baldwin Hills Village; 5300 Rodeo Road	Listed in NRHP and CRHR	1941

Dorsey High School (P-19-188894) is located immediately east of the Project APE at 3537 Farmdale Avenue. The school was determined eligible for listing in the NRHP by a consensus through the Section 106 process and is listed in the CRHR. Dorsey High School is also referred to as the Susan Miller Dorsey High School and was originally constructed in 1937. The school consists of an administration building; numerous classroom buildings; two gymnasiums; a cafeteria; a student store; outdoor lunch areas and courtyards; a boiler room; shops; and athletic fields. H.L. Gogerty and C.E. Noerenberg are the architects that designed the school in an Art Deco style. The school's period of significance is 1937–1961 as it was originally constructed between 1937 and 1939; subsequent construction occurred ca. 1958 and 1960; and more recent construction occurred post 1969 (McKenna 2010).

The building located at 4801 Exposition Boulevard is a warehouse that was constructed in 1956. According to the HRI listing, the building was evaluated in 2008 and was determined ineligible for the NRHP by consensus through the Section 106 process, but was not evaluated for the CRHR or local listing.

The building located at 5202 Exposition Boulevard is a residential building that was constructed in 1947. The HRI listing indicates that the building was evaluated in 2003 and was determined ineligible for listing in the NRHP pursuant to Section 106 without review by the State Historic Preservation Officer (SHPO).

The building located at 3036 Farmdale Avenue is a residential building that was constructed in 1925. The HRI listing indicates that the building was evaluated in 2008 and was determined ineligible for listing in the NRHP pursuant to Section 106 without review by SHPO.

Baldwin Hills Village (P-19-174405) located at 5300 Rodeo Road is a district that is situated less than 0.25 mile southwest of the Project APE. The district is listed as multi-dwelling and is a middle-income residential community situated on 64 acres. The contributing resources within the district include 94 residential buildings, a clubhouse that has been converted into two separate residences, one building for administration and community activities, one maintenance building, and 64 garage structures. The noncontributing resources to the district consist of 28 garage structures. The overall design style of the resources within the district is classified as Modern Movement. According to the site record for this resource, the architects of Baldwin Hills Village, Clarence Stein (consulting architect), Reginald D. Johnson, Lewis Wilson, Edwin Merrill, and Robert Elexander, modeled the village after Stein's "Radburn Idea," providing high-quality urban housing for residents. The construction of the village began in 1941 and was completed in 1942 with the cost of approximately \$3.3 million and was backed by Franklin Delano Roosevelt's new Federal Housing Administration. The district was evaluated in 1993 and is listed in both the NRHP and the CRHR.

California Historical Landmarks

A search of the CHL list found no additional landmarks within the study area.

Los Angeles Historic-Cultural Monuments

LAHCMs are sites in Los Angeles that have been designated by the Los Angeles Cultural Heritage Commission. A historical or cultural monument is eligible for listing as an LAHCM under Article 4, Section 22.130 of the City of Los Angeles Administrative Code.

No LAHCMs were identified within the APE, but two LAHCMs were identified within 0.5 mile of the APE (Table 5).

Monument Number (LAHCM-)	Address	Description
174	5112–5995 Village Green	Village Green
1066	Martin Luther King, Jr. Boulevard Degnan Boulevard Leimert Boulevard	South Los Angeles Canary Island Pine Street Trees

Table 5. Los Angeles Historic-Cultural Monuments within the Study Area

LAHCM-174 is the Village Green, also known as Baldwin Hills Village, described in the Historic Property Data File section above.

LAHCM-1066 is a group of Canary Island pine trees planted along Martin Luther King, Jr., Degnan, and Leimert Boulevards. The trees were planted in the early 1990s as the largest living memorial to Dr. Martin Luther King, Jr. The trees planted along Martin Luther King, Jr. Boulevard extend to Nicolet Avenue, within 0.15 mile of the APE. LAHCM-1066 has not been evaluated for the NRHP or the CRHR because, at the time of its listing as an LAHCM, it failed to meet the 45-year threshold for the CRHR or the 50-year threshold for the NRHP.

Additional historic research to develop a historical context for the Project area was conducted at a number of archival repositories and local agency archives. Archives searched include the Los Angeles Public Library (LAPL), the Los Angeles County Office of the Assessor website, and Navigate LA. Documents searched during the course of the research include book publications, historic newspaper articles, historic photographs, historic maps, and historic site and building inventories.

Historic Maps

The earliest maps showing the Project area are diseños of Rancho Cienega o Paso de la Tijera. These diseños show the Project area as mostly undeveloped land. The northern boundary of the rancho follows a drainage approximately at the location of the Los Angeles County Metropolitan Transportation Authority's (Metro) Expo Line light rail tracks. One diseño in the Huntington Library labels this feature a "sanja" (Botello 1857); it may in part be an artificial drainage ditch. A second diseño, which depicts the rancho as it existed in 1857, shows swamps over much of the Project area. The drainage on the north end of the rancho is shown, as is a second drainage along a portion of what is today Martin Luther King, Jr. Boulevard. A crossing southeast of the Project area, approximately at the current location of the intersection of Martin Luther King, Jr. Boulevard and Crenshaw Boulevard, is labeled "Paso de la Tijera" (Botello 1857). However, these drainages are not shown as parts of the massive City-maintained zanja system in William H. Hall's comprehensive *Irrigation Map of Los Angeles and San Bernardino Counties* (Hall 1888).

Early U. S. Geological Survey (USGS) maps show a swampy terrain crossed by a braided channel (USGS 1898, 1902). Railroad tracks follow the alignment now occupied by the Metro Expo Line, and a depot called Cienega is located east of the Project area.

By the 1920s, the land appears to have been largely reclaimed. Swamps are no longer prevalent, and the drainages are more regular. A drainage now appears in a straight line flowing northwest-southeast along the approximate modern route of Martin Luther King Boulevard. This drainage cuts diagonally across the current location of Jackie Robinson Stadium (USGS 1921, 1926).

By the 1950s, much of the area surrounding the Project area has been developed. Dorsey High School appears to the east of the Project area. The Project area itself is designated Rancho Cienega Playground. The drainage that flowed diagonally across the Project area is by then the six-lane Santa Barbara Avenue (now Martin Luther King, Jr. Boulevard), but no trace of the drainage exists in the Rancho Cienega Sports Complex (USGS 1953).

NATIVE AMERICAN CONTACT PROGRAM

Sacred Lands File Search

As part of this investigation, AECOM conducted a Native American contact program on behalf of the City, to inform interested parties of the proposed Project and to address any concerns regarding Traditional Cultural Properties or other resources that might be affected by the Project. The program involved contacting Native American representatives provided by the Native American Heritage Commission (NAHC) to solicit comments and concerns regarding the Project. Documents pertaining to the Native American contact program are attached as Appendix B.

Letters were prepared and mailed to the NAHC on September 25, 2015. The letters requested that a Sacred Lands File check be conducted for the Project and that contact information be provided for Native American groups or individuals that may have concerns about cultural resources in the Project area. The NAHC responded to the request in a letter sent via email on October 9, 2015, and dated October 7, 2015. The letter indicated that a Sacred Lands File search had been conducted with negative results. The letter also included an attached list of Native American contacts whom it indicated may have information about Native American cultural resources within the Project area.

Letters were mailed on September 24, 2015, to nine groups (parties) anticipated to be on the NAHC contact list: Anthony Morales of the Gabrielino/Tongva San Gabriel Band of Mission Indians, Andrew Salas of the Gabrielino Band of Mission Indians – Kizi Nation, Bernie Acuna and Conrad Acuna of the Gabrielino-Tongva Tribe, John Tommy Rosas of the Tongva Ancestral Territorial Tribal Nation, Linda Candelaria of the Gabrielino-Tongva Tribe, Robert F. Dorame of the Gabrielino Tongva Indians of California Tribal Council, Sam Dunlap of the Gabrielino Tongva Nation, and Sandonne Goad of the Gabrielino/Tongva Nation. Maps depicting the Project APE and response forms were attached to each letter. Follow-up phone calls were made to each of these nine parties on October 9, 2015. Two responses were received, and one commented during follow-up calls, as described below.

In addition to the parties listed above, Chairperson Rosemary Morillo (Attn: Carrie Garcia) of the Soboba Band of Mission Indians was identified in the list provided by the NAHC on October 9. A letter was sent to Chairperson Morillo, Attn: Carrie Garcia, on October 12, 2015. Mr. Joseph Ontiveros responded to the letter via mail dated November 11, 2015. The letter is confidential, but the contents of the letter have been taken into consideration under the Native American contact program.

Mr. Andrew Salas responded to the letter via email on September 30, 2015. Mr. Salas indicated in his email that the Project location is "within sacred village sites and is known to be highly sensitive." Mr. Salas requested that one of his tribal monitors be on-site to monitor all ground-disturbing activities.

Mr. Anthony Morales was reached by phone on October 9, 2015. Mr. Morales stated that even though no prehistoric cultural resources had been identified in the Project footprint, he considers

additional cultural landscape elements to make his determination about cultural sensitivity. These elements include the location of the Project in an area considered closer to the west where there is a high presence of known village sites and higher populations in the past; the proximity of the Project to the Interstate 10 freeway, which likely follows major travel ways used by people in the past; and the likely presence of known historic or present waterways that would suggest past use, as well as open spaces that still contain indigenous plant species that people would have used for medicine, food, and other resources. Based on this, Mr. Morales suggested that a Native American monitor should be present during ground disturbance activities due to the proximity of known prehistoric sites. Mr. Morales also suggested that his group, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, be contacted for monitoring activities.

PALEONTOLOGICAL RECORDS SEARCH

A paleontological records search was conducted by Dr. Samuel McLeod, Vertebrate Paleontology Division of the Natural History Museum of Los Angeles County on September 30, 2015. The records check indicated that fossil localities are known nearby and within the same sedimentary deposits that occur in the Project APE, but none have been recorded within the Project APE itself (McLeod 2015; Appendix C).

Formations

Surficial deposits in most of the Project APE consist of younger Quaternary Alluvium derived broadly as fluvial deposits from the Los Angeles River to the east that flows towards what is now Ballona Creek that flows just to the west of the APE. At the southwestern one-third of the Project APE, surficial deposits consist of younger Quaternary deposits of clay and sand derived from a preexisting marshland.

Results

Younger Quaternary Alluvium usually does not yield significant fossil vertebrates in its upper levels. However, older Quaternary Alluvium, which is relatively shallow in the Project APE, may contain significant fossils and can be found at varying depths beneath the younger alluvium. In the 1920s, excavation work for outfall sewers in the vicinity of the Project APE revealed a cluster of fossil specimens in the older Quaternary sediments.

Eight Los Angeles County Museum (LACM) fossil localities were identified in older Quaternary deposits near the Project APE (Table 6). The closest is LACM 3369, located approximately 0.20 mile directly west of the southern boundary of the Project APE, at Sycamore Avenue and Rodeo Road. That locality produced a fossil specimen of horse (*Equus*), at a depth of 6 feet below the surface. West of LACM 3369, along Rodeo Road, are localities LACM 3367 and LACM 3370. These localities produced fossil mastodon (*Mammut*) and a fossil sabertooth cat (*Smilodon*), both at unknown depths. To the northwest of the Project APE, along the SPRR and Exposition Boulevard, locality LACM 3366 produced a specimen of fossil camel (*Camelops*) at an unknown depth. West of the Project APE, near the intersection of Moynier Lane and Higuera Street, locality LACM 4232 produced specimens of fossil mammoth (*Mammuthus*) and fossil human (*Homo sapiens*). Both of these specimens were found in sand and clay silts. North of locality LACM 4232, along Sentous Avenue on the east side of Ballona Creek, is locality LACM 3368

which produced a specimen of fossil horse (*Equus*) at an unknown depth. In addition, locality LACM 4250, located southeast of the intersection of Jacob Street and Sentney Avenue on the west side of Ballona Creek, produced a specimen of fossil mammoth (*Mammuthus*) at an unknown depth. East of the southern boundary of the Project APE, near the intersection of Rodeo Road and Buckingham Road, locality LACM 1159 yielded the remains of fossil human (*Homo sapiens*), at depths of 19 to 23 feet below the ground surface; this site is identical to archaeological site CA-LAN-171.

Locality	Scientific Name	Common Name
LACM 1159	Homo sapiens	Human
LACM 3366	Camelops	Camel
LACM 3367	Mammut	Mastodon
LACM 3368	Equus	Horse
LACM 3369	Equus	Horse
LACM 3370	Smilodon	Sabertooth Cat
LACM 4232	Mammut Homo sapiens	Mastodon Human
LACM 4250	Mammut	Mastodon

 Table 6. Natural History Museum of Los Angeles County Quaternary Fossil Localities near

 the Project APE

METHODS

SURVEY METHODOLOGY

A cultural resources pedestrian field survey of the Project APE was conducted by Linda Kry, B.A., and Kyle Griffith, B.A., on October 1, 2015. The goals of the survey were to identify any previously recorded or previously unknown cultural resources within the survey area and to evaluate potential for any buried resources. Pedestrian survey was conducted within all accessible portions of the Project APE, including the existing gymnasium, the proposed maintenance yard and refuse collection center, the proposed community garden, and the proposed upgraded parking lot and off-street parking areas. The existing restroom facility was inaccessible during the time of the survey as it was fenced off for tree-trimming activities. In addition, access was limited to the existing indoor pool, Celes King III Pool, due to the hours of operation. The cultural resources survey included identification of archaeological and built environment resources. The entirety of the Project APE has not been previously surveyed.

Cultural resources identified during the survey were documented on appropriate Department of Parks and Recreation (DPR) 523 series forms. DPR 523 series forms are included in this report in Appendix D.

RESULTS

ARCHAEOLOGICAL RESOURCES

The cultural resources pedestrian field survey conducted on October 1, 2015, did not identify any archaeological resources in the Project APE. The Project APE encompasses the entire Rancho Cienega Sports Complex parcel (APN 5046013900), which consists of approximately 1,261,855 square feet or 29 acres. However, the survey focused only on areas that were to be impacted by the proposed Project (see Figure 3). These areas include the existing gymnasium, restroom facility, and tennis shop along the southern half of the parcel, and the existing maintenance building located near the northwest corner of Robinson Stadium. The majority of the Project APE is paved or built with the exception of landscaped areas. All observed ground soil was light to medium compacted, light brown to medium brown fine-grained silt with sand, poorly sorted with mulch or vegetation cover. As the Project APE is entirely developed with the exception of landscaped areas, which were inspected and appeared to consist of nonnative soils, there were no archaeological resources observed.

HISTORIC ARCHITECTURAL RESOURCES

The cultural resources survey included an intensive survey for potentially historic built environment resources. The survey identified several resources, including the Rancho Cienega Sports Complex, which comprises the Project APE, and several buildings and structures within it. For the purposes of this study, buildings within the complex that may be directly impacted by the Project were evaluated individually. Resources that are or appear to be 45 years or older within the Project APE were recorded on DPR 523 series forms and evaluated under NRHP and CRHR criteria.

Rancho Cienega Sports Complex

The Rancho Cienega Sports Complex is located at 5001 Rodeo Road and consists of an approximately 30-acre recreational park that primarily contains various athletic fields and sports facilities. Beginning in 1937, the complex was built in several phases. It currently contains (clockwise from the southwest corner) a football and track stadium (Jackie Robinson Stadium) in the southwestern corner surrounded by grandstands and an associated restroom facility; a maintenance building and a large paved parking lot in the northwest corner; baseball and softball (or Little League) fields in a central area; a soccer field in the northeast corner; two basketball and two volleyball courts on a rectangular hard surface; 12 asphalt tennis courts in the southeastern corner; the Celes King III indoor swimming pool and a day care center in the southeast central area; and a restroom facility, a gymnasium, and an additional parking lot in the southwest central area. The majority of the athletic fields and sports facilities are in their original locations from when they were first constructed. Alterations to the site have included the improvements to the stadium; the resurfacing and/or conversion of the playing fields for different sports; the resurfacing of and additional parking facilities; the addition of the indoor pool, bathhouse, and restroom facility circa 1963; the removal of the original field house and the construction of a new gymnasium in 1980; and the addition of the day care center circa 2002.

Maintenance Building

Located just north of Jackie Robinson Stadium, the maintenance building, also known by its historic name "team building," is a modest one-story building with a rectangular plan, stucco walls, and slats in the low-pitched gable below a Spanish tile roof (Plate 5). The south side of the building contains three single doors above a concrete porch and two filled-in window openings. The west side contains a central single door with a concrete porch, a window opening containing a pair of three-light casement windows (currently boarded), and a smaller window opening that appears filled in. The east side contains a single door over a concrete porch and no other fenestration. The north side contains a series of five rectangular window openings, three of which are boarded or filled, and the other two that are obscured with security screens. A plaque on the south wall of the building indicates that it was built by the WPA in 1937.



Plate 5. Maintenance building, west and south sides, view facing northeast

Celes King III Indoor Pool

The Celes King III Indoor Pool was constructed in June 1963. The building is five bays wide and has an asymmetrical, side-gabled roofline with a steep front and a low pitch towards the rear of the building. The building reflects modern style with the abstract acute angles in the criss-cross form of glass panels that compose the sloped south side (Plate 6). The south side consists of intersecting, angled concrete forms inset with multi-light glass panels. The east side of the building also has a low band of triangular glass panels with a solid stucco/concrete wall above. A one-and-a-half-story concrete block addition is located to the rear of the east side, and contains a single door and no other apparent fenestration. The west side also has a low, narrow band of triangular glass panels, and otherwise consists of a stucco/concrete wall with two one-story concrete block additions with access doors. The rear of the building consists of a concrete block wall that contains the main entrance to the building. The entrance is a projecting, covered, glazed enclosure, with two symmetrical sets of double doors with transoms above and glass panels flanking the doors. The interior of the building contains a pool with five swimming lanes and five associated diving boards at one end (Plate 7).



Plate 6. Celes King III Indoor Pool, south side, view facing northwest



Plate 7. Celes King III Indoor Pool, interior, view facing northeast

Tennis Shop

The tennis shop is a one-story building with rectangular plan (Plate 8). It has concrete block walls, a very low-pitched hipped roof with exposed rafters, overhanging eaves, and asphalt roofing. The building faces east towards the tennis courts, is three bays wide, and has a full-length covered porch supported by four concrete block columns. In the southern bay, there is a roll-up utility door. The central bay is filled and is covered with stucco siding. The northern bay contains a steel and glazed storefront with fixed window panels and a single access door with transoms above. The north, south, and west walls of the building are concrete block with no fenestration. On the west wall, a trellis system has been installed to encourage ivy/vine growth.



Plate 8. Tennis Shop, view facing northeast

Restroom Facility

Constructed circa 1964 (historicaerials.com), the restroom facility is a one-story building with two segregated men's and women's restrooms divided by an outdoor breezeway (Plate 9). The building has an L-shaped plan and is oriented at an angle from the road. It has concrete block walls, a very low-pitched roof with exposed rafters, overhanging eaves, and asphalt roofing. Within the ell of the building on the south side, there is a partial-width porch covering supports by simple 4-inch by 4-inch posts. On the south side, a pair of utility doors accesses the east side of the building. Adjacent to the doors, the building projects under the porch. In this section, multi-paned windows at the corners are obscured by security screens. Access to the restrooms is provided through doors within the breezeway. The north side of the building has a series of clerestory windows near the roofline and within the gable of the cross-gable forming the ell.



Plate 9. Restroom Facility, north side, view facing south

SUMMARY

No archaeological sites were identified as a result of the survey. The Rancho Cienega Sports Complex and four individual buildings within the complex were identified and recorded on DPR 523 series forms (Appendix D).

EVALUATION AND MANAGEMENT RECOMMENDATIONS

REGULATORY SETTING

NEPA and NHPA

Under NEPA, the federal lead agency is responsible for determining whether a project may have a significant impact on historical resources, and under Section 106 of the NHPA, the federal lead agency is responsible for determining whether an undertaking may have an adverse effect on historic properties. Regulations for implementing NEPA and Section 106 of the NHPA are found in 40 Code of Federal Regulations (CFR) Parts 1500–1508 and 36 CFR Part 800, respectively.

The criteria of the NRHP is "an authoritative guide to be used by federal, state, and local governments; private groups; and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2). To be eligible for listing in the NRHP, a property must be at least 50 years old (or have reached 50 years old by the project completion date) and possess significance in American history and culture, architecture, or archaeology to meet one or more of four established criteria (36 CFR 60.4):

- A. Association with events that have made a significant contribution to the broad patterns of our history;
- B. Association with the lives of persons significant in our past;
- 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; and/or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Historic resources eligible for listing in the NRHP are considered "historic properties," and may include buildings, sites, structures, objects, and historic districts. A potential historic property less than 50 years of age may be eligible under NRHP Criteria Consideration G if it can be demonstrated that sufficient time has passed to understand its historic importance (National Register Bulletin 15, page 43). To be eligible for listing in the NRHP, a property must also have integrity, which is defined as "the ability of a property to convey its significance." Within the concept of integrity, the NRHP recognizes seven aspects or qualities that, in various combinations, define integrity: feeling, association, workmanship, location, design, setting, and materials (National Register Bulletin 15, pages 44–45).

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified

subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative (36 CFR 800.5[a][1]).

California Environmental Quality Act

Under CEQA, the lead agency is responsible for determining whether a project may have a significant impact on historical resources. Historical resources are defined as resources eligible for the CRHR, as described below.

The CRHR is a listing of State of California resources that are significant within the context of California's history, and includes all resources listed in or formally determined eligible for the NRHP. The CRHR is a statewide program of similar scope to the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. A historic resource must be significant at the local, state, or national level under one or more of the following criteria defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850:

- 1. It is associated with events or patterns of 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, or represents the work of a master, or possesses high artistic values;
- 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.

Assessment of a project's impacts is based on the level of direct and indirect physical changes to a significant resource. A significant impact would occur if the project:

- Alters a resource or its setting in a manner that affects the qualities that make it significant. Direct impacts to archaeological resources include grading, and for built resources include removal of key elements (e.g., roof), or demolition;
- Indirectly alters the setting, access to, or other elements of the resource in a manner that negatively affects the significance of the resource. Examples of indirect impacts include increased erosion at archaeological sites or visual intrusion of buildings that are left vacant; or
- Disturbs any human remains, including those located outside of formal cemeteries.

EVALUATION

Rancho Cienega Sports Complex

Construction of the Rancho Cienega Sports Complex began in 1936–1937 and was a joint project between the City and the WPA. It is associated with civic works projects of the WPA during the Great Depression and the expansion of the City's recreational facilities in the growing Los Angeles suburbs. Although the WPA funded approximately 50% of the project and provided the labor to grade and construct the facilities, the association of the facility and the WPA is not particularly representative of the significant work that the WPA did throughout Los Angeles and the nation as part of the New Deal. The complex was the largest playground in Southern California at the time it was planned and constructed, and "one of the most important major units in the Playground and Recreation Department's system of playgrounds" (LAT 1937a). However, the overall expansion of all of the recreational facilities under the City's Department of Playground and Recreation was representative of the civic projects to improve public facilities during a period of growth and suburban expansion. The Rancho Cienega Sports Complex as a whole does not reflect any specific historical themes and is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1.

The land on which the Rancho Cienega Sports Complex is located was donated by Anita M. Baldwin, an heiress and philanthropist, whose money and land came from the estate of her father, Lucky Baldwin. While Anita M. Baldwin is an important historical figure, the direct association between her land donation and the creation of the Rancho Cienega Sports Complex is tenuous, as she is more closely associated with projects in Arcadia, California, and donated large tracts of the Baldwin estate to various charities and municipalities. There are no other known associations between the complex and other important historic persons. The complex is not eligible under NRHP Criterion B or CRHR Criterion 2.

The athletic facilities at the Rancho Cienega Sports Complex, including a football and track stadium with grandstands, baseball and softball diamonds, tennis, volleyball and basketball courts, and restroom facilities, employ typical materials, forms, and design, with the exception of the Celes King III Indoor Pool, which was an addition to the park in 1963. The facilities have been updated and altered over the years to maintain the park's functionality. The complex as a whole does not demonstrate any particular architectural significance and does not meet NRHP Criterion C or CRHR Criterion 3.

This complex does not, nor is likely, to yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

Maintenance Building

Built in 1937 by the WPA, the maintenance building was part of the Rancho Cienega Sports Complex, a new recreational park under the City's Department of Playground and Recreation through the joint project with the WPA. The building is associated with civic works projects of the WPA during the Great Depression and the expansion of the City's recreational facilities in the growing Los Angeles suburbs. Although built by the WPA, the association of this modest building and the WPA is not particularly representative of the significant work that the WPA performed under the New Deal. The building was built as a small support structure to the athletic fields, providing a restroom and a place for teams to change. It is not particularly representative of any specific historical themes and is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the 1930s, this building does not represent a specific style, although it has some Spanish Eclectic features such as stucco siding and a Spanish tile roof, and it is not architecturally significant. Built by the WPA, it is a very modest example of the WPA's body of architectural work. It does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

Celes King III Indoor Pool

The Celes King III Indoor Pool is associated with the expansion of civic recreational facilities in Los Angeles in the 1960s. Built in 1963, the pool represented the fruition of the plan for a public pool at the park proposed in 1936. Original plans for a pool and bathhouse were put on hold until the development of the community created a demand for the facility. In 1957, the funding for the pool was granted. In the 1960s, it was the only indoor pool operating throughout the year, but it was not Los Angeles' first indoor pool. Swimming pools gained popularity across the country in the 1920s and 1930s, meeting the increasing demand for outdoor recreation, with a phase of public pool construction connected to the New Deal era (Wiltse 2007). By 1925, Los Angeles had 15 indoor and three outdoor pools in operation (Wiltse 2007). The Celes King III Indoor Pool is not representative of the historical theme of indoor public pools in Los Angeles as a particularly significant example; therefore, it is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1.

In 1998, the City Council voted to rename the pool in honor of Celes King III, past president of the Los Angeles City Human Relations Commission and the Los Angeles NAACP, and former state chairman of the Congress of Racial Equality (Los Angeles Sentinel 1998; LAT 1998). However, there is no direct association between King and the pool building. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2.

Designed circa 1960, the pool building reflects the modern architectural movement in Los Angeles in the mid-20th century, when innovative designs and materials were expressive in dramatic new ways using abstract images, acute angles, and pillars rendered in concrete (National Trust for Historic Preservation 2010). Modern architecture in Los Angeles "manipulated light and space to create soaring interior spaces and striking exterior silhouettes," and "even modest structures sought to incorporate stylistic flair" (National Trust for Historic Preservation 2010). The pool building is representative of the modernity of Los Angeles ind-20th century architectural movement. Designed by Albert Criz, the striking diamond-shaped window panels of the south façade are representative of his body of work throughout Los

Angeles, most clearly represented in the West Los Angeles Civic Center that Criz designed circa 1960. Criz is not an established master architect in general architectural context for Los Angeles, but is noted for several modern civic works that may be determined significant as they achieve 50 years in age. The Celes King III Indoor Pool is a good example of Criz's design work. The building is architecturally significant and meets NRHP Criterion C and CRHR Criterion 3 at the local level for its contribution of modern architectural design in Los Angeles.

The Celes King III Indoor Pool does not, nor is likely to yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

Opened to the public in June 1963, the heated pool operated year-round until 1990, when it was closed due to leaking and water circulation problems. The \$250,000 improvements included repainting; replacing broken windows and doors; and installing new filters, a heating system, and a dehumidifier (Harris 1992; Aubry 1993). The pool reopened in 1993, with no apparent alterations to the original design of the building. The building retains its feeling, association, workmanship, location, design, setting and materials, as a modern-designed indoor pool located within a recreational complex in Los Angeles. The pool is eligible for listing in the NRHP and the CRHR.

Tennis Shop

Built circa 1964, the tennis shop building is associated with the development of recreational facilities in the mid-20th century in Los Angeles. This building was a later addition to the complex that was started in 1936. It relates to the renovation of the property for continued use of the recreational parks and does not reflect any specific historical themes. It is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the mid-20th century, this building is not architecturally significant and does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

Restroom Facility

Built circa 1964, the restroom facility located at the Rancho Cienega Sports Complex is associated with the development of recreational facilities in the mid-20th century in Los Angeles. This building was a later addition to the complex that was started in 1936. It relates to the renovation of the property for continued use of the recreational parks and does not reflect any specific historical themes. It is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the mid-20th century, this building is not architecturally significant and does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional

information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

ASSESSMENT OF EFFECTS AND IMPACTS

One historic property has been identified within the Project APE. . The Celes King III Indoor Pool is a historic property and historical resource that is eligible for listing in the NRHP and the CRHR. Its character-defining features include the stylized configuration of windows primarily on the south side of the building that continue on the east and west sides, its roof slope, and the presence of the indoor pool. However, this property will not be altered by the proposed project. Therefore, no historic properties or historical resources will be impacted by construction or operation of the proposed project.

RECOMMENDATIONS

Archaeological Sensitivity and Recommendations

Review of previous investigations in the vicinity of the Project and of the prehistoric context for the area provides an understanding of the potential for encountering prehistoric sites in the Project APE. The important factors to consider in constructing such a model include elevation, soil conditions, proximity to water sources, and proximity to raw materials. In addition, subsequent land use is an essential factor in whether archaeological remains have been preserved.

The Project APE lies within the watershed of present-day Ballona Creek, which was also the former bed of the Los Angeles River. Other swamps and watercourses formerly lay within the Project APE itself. The rich resources of the Ballona Creek watershed and nearby Baldwin Hills were known to attract native peoples.

Archival research revealed that five prehistoric sites, including one burial site, are located less than 0.5 mile west of the Project APE. The closest site is less than 0.15 mile west of the Project APE. Moreover, some of these are deeply buried by alluvium. For example, the human remains uncovered at site CA-LAN-171 lay up to 23 feet below the 1924 ground surface (Brooks et al. 1990). Archaeological sites may also be buried by fill imported to reclaim the Rancho Cienega Sports Complex during its development beginning in the 1930s.

The lack of surface evidence of archaeological materials does not preclude the possibility that subsurface archaeological materials may exist. The presence of alluvium may mean that any surface evidence of archaeological materials has been buried and could be encountered during excavation. Based on the results of this cultural resources assessment, the Project area is culturally sensitive for prehistoric and/or historic archaeological resources. The following recommendations are intended to reduce impacts to unanticipated archaeological resources.

Because the potential to encounter archaeological resources exists for this Project, archaeological monitoring should be conducted during all ground-disturbing activities into native soils. Because

of previous disturbances to the site, this depth is unknown. Monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full time. The archaeological monitor will have the authority to redirect construction equipment in the event potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery will halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5.

In addition, it is recommended that the construction personnel and staff receive training on possible archaeological resources that may be present in the area in order to establish an understanding of what to look for during ground-disturbing activities.

If Native American cultural materials are encountered during Project-related ground disturbance, a trained Native American consultant should be engaged to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis and would be intended to ensure that Native American concerns are taken into account during the construction process.

In the unlikely event that human remains are discovered, work in the immediate vicinity of the discovery will be suspended and the Los Angeles County Coroner contacted. If the remains are deemed Native American in origin, the Coroner will contact the NAHC and identify a Most Likely Descendant pursuant to Public Resources Code Section 5097.98 and California Code of Regulations Section 15064.5. Work may be resumed at the landowner's discretion but will only commence after consultation and treatment have been concluded. Work may continue on other parts of the Project while consultation and treatment are conducted. Any archaeological materials recovered should be prepared for and curated at an approved facility.

Built Environment Recommendations

The Rancho Cienega Sports Complex, maintenance building, tennis shop, and restroom facility were not found to be eligible under any of the four NRHP or CRHR criterion. The Celes King III Indoor Pool is considered eligible for the NRHP and the CRHR. However, potential Project impacts would not affect those qualities of the pool building which contribute to its eligibility, such as its stylized configuration of windows that are located primarily on the south side of the building. DPR 523 forms for the Rancho Cienega Sports Complex, the maintenance building, tennis shop, restroom facility, and Celes King III Indoor Pool have been prepared and satisfy the minimum level of documentation required for cultural resources.

Paleontological Recommendations

Archival research indicates that excavations near the Project area extending into older Quaternary have encountered significant vertebrate fossils. In some places, Quaternary older alluvium and significant fossil remains may lay close to the surface. For example, the closest fossil locality recorded by the NHMLAC, near the intersection of Rodeo Road and Sycamore Avenue, encountered fossil horse at a depth of only 6 feet below ground surface. Therefore, excavations into undisturbed older Quaternary layers, which varies in depth within the Project vicinity, should be monitored. Monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full-time.

In the event that potential paleontological resources are encountered, a qualified paleontologist should be retained to recover and record any fossil remains discovered. Any fossils, should they be recovered, shall be prepared, identified, and catalogued before curation in an accredited repository designated by the lead agency.

REFERENCES CITED

Aubry, Erin J.

1993 Crenshaw: Indoor Pool Opens After 2-Year Hiatus. *Los Angeles Times*, 25 July: 10. Los Angeles, California.

Bean, Lowell John, and Charles R. Smith

1978 *Gabrielino*. In *Handbook of North American Indians*, vol. 9, pp. 538–562. Robert F. Heizer, editor. Smithsonian Institution, Washington, D.C.

Bell, Horace

1881 *Reminiscences of a Ranger or Early Times in Southern California.* Yarnel, Caystile, and Mathes, Los Angeles.

Botello, Fracisco

1857 *Rancho Cienega o Paso de la Tijera*. Available online: http://hdl.huntington.org/ cdm/singleitem/collection/p15150coll4/id/11361/rec/5 Accessed October 19, 2015.

Brooks, Sheilagh, Richard H. Brooks, G.E. Kennedy, J. Austin, James R. Firby, Louis A. Payen, Peter J. Slota, Jr., Christine A. Prior, and R.E. Taylor

1990 The Haverty Human Skeletons: Morphological, Depositional, and Geochronological Characteristics. *Journal of California and Great Basin Anthropology* 12(1): 60-83.

City of Los Angeles

2013 Annexation and Detachment Map, City of Los Angeles. Available online: http://navigatela.lacity.org/common/mapgallery/pdf/annex34x44.pdf Accessed October 19, 2015.

Electric Railway Historical Association

n.d. Street Railway History of Los Angeles. Available online: http://www.erha.org/ railwayhis.htm. Accessed October 20, 2015.

Erlandson, Jon M.

1994 Early Hunter-Gatherers of the California Coast. Plenum Press, New York.

French, Virginia Fonseco

1970 Rancho La Cienega o Paso de la Tijera. Self-published.

Gazzar, Brenda

2012 Revisiting Anita M. Baldwin. *Pasadena Star-News*. 21 April. Available online: http://www.pasadenastarnews.com/general-news/20120421/revisiting-anita-mbaldwin.

Guinn, James Miller

1915 *History of California and an Extended History of Los Angeles and Environs.* Historic Record Company, Los Angeles.

Gumprecht, Blake

1999 The Los Angeles River: Its Life, Death and Possible Rebirth. John Hopkins University Press, Baltimore, MD.

Hall, William Hammond

1888 California State Engineering Department, Detail Irrigation Map, Los Angeles Sheet. Sacramento: California Department of Engineering. Also available online: http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~207644~3003399:C alifornia-State-Engineering-Depart?qvq=q:Author%3D%22Hall%2C%2BWm.%2B Ham.%2B(William%2BHammond)%22;lc:RUMSEY~8~1&mi=3&trs=35. Accessed October 16, 2013.

Harris, Lee

1992 A Summary of Significant Los Angeles City Hall Decisions Affecting the Westside in the Last Week. *Los Angeles Times*, 27 August: 4. Los Angeles, California.

Hawthorne, Christopher

2006 Hooray for Sprawlywood. Los Angeles Times. 3 December: S6. Los Angeles.

Jackson, Robert H.

1999 Agriculture, Drought & Chumash Congregation in the California Missions (1782-1834), *California Mission Studies Association*. Articles, May Newsletter.

James, Clarence

1955 New Valley Courtroom, 1955. Available online: http://digitallibrary.usc.edu/ cdm/ref/collection/p15799coll44/id/94307.

Kielbasa, John R.

1997 Historic Adobes of Los Angeles County. Pittsburgh: Dorrance Publishing Co.

Koyl, George S., ed.

1962 American Architects Directory. New York: R.R. Bowker Company.

Kroeber, A. L.

1925 Handbook of Indians of California. *Bureau of American Ethnology Bulletin* 78, Smithsonian Institution, Washington D.C.

Los Angeles Conservancy

2015a Mar Vista Gardens. Available online: https://www.laconservancy.org/locations/ mar-vista-gardens. Accessed October 15, 2015.

- 2015b West Los Angeles Civic Center. Available online: https://www.laconservancy. org/locations/west-los-angeles-civic-center. Accessed October 15, 2015.
- Los Angeles Department of Recreation and Parks
 - 2004 The State of City Swimming Pools in Los Angeles. Available online: http://www.laparks.org/dos/aquatic/poolsReport04/. Accessed October 8, 2015.

Los Angeles Sentinel

1998 Pool Renaming Event to Honor Celes King III. 8 October: B1, B2. Los Angeles, California.

Los Angeles Times (LAT)

- 1936a Location of What Will Be City's Largest Playground. 8 November: E7.
- 1936b Plans Under Way for Large Sports Center. 2 February: E1.
- 1936c Playground Work Begun. 11 November: 11. Los Angeles, California.
- 1937a Additional Items Proposed for Extensive Playground. 11 July: E1, E6. Los Angeles, California.
- 1937b Rancho Cienega Playground Beautification Started. 23 April: A2. Los Angeles, California.
- 1942 Film Aid Home Nears Reality. 1 July: A2. Los Angeles, California.
- 1960 Pool Bid Opening. 19 December: 20. Los Angeles, California.
- 1963 One Open Nights: West Side Pools to Get Swim In. 20 June: J3. Los Angeles, California.
- 1965 Swimming Pools End Season. 9 September: WS7. Los Angeles, California.
- 1967 City Pools to Close. 10 September: K7. Los Angeles, California.
- 1970 Court Building Expansion Plans to be Drafted. 17 December: WS2. Los Angeles, California.
- 1972 W.L.A. Court Parking Facility to be Built. 7 May: WS4. Los Angeles, California.
- 1974 Court Plans to be Drawn. 4 April: WS5. Los Angeles, California.
- 1998 News in Brief. 14 January: 4. Los Angeles, California.

McGreevy, Patrick

2001 10 Parks to Get Upgrades. Los Angeles Times, 29 October: B1. Los Angeles, California.

McKenna, Jeanette A.

2010 An Architectural Evaluation of Buildings within the Dorsey High School Campus in Anticipation of Campus Improvements, Los Angeles, Los Angeles Co., CA. Report prepared by McKenna et al. for the Planning Center. Report on file, South Central Coastal Information Center, California State University, Fullerton.

Meyer, L.

1981 Los Angeles, 1781–1981. A Special Bicentennial Issue of California history, Spring 1981. California Historical Society, Los Angeles.

National Trust for Historic Preservation

2010 Los Angeles Modern: City of Tomorrow. Dated October 2010.

Reid, Hugo

- 1939 [1852] Letters on the Los Angeles County Indians. In *A Scotch Paisano in Old Los Angeles*, by Susanna Bryant Dakin, pp. 215–286. University of California Press.
- 1977 [1851] The Decay of the Mission. In *Los Angeles, Biography of a City*, edited by John Caughey and LaRee Caughey, pp. 102–104. University of California Press, Berkeley.

Robinson, W. W.

- 1939 Ranchos Become Cities. Pasadena: San Pasqual Press.
- 1979 Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads. University of California Press, Berkeley, CA.

Russell, Caroline H.

1990 Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards. Historic American Building Survey/Historic American Engineering Record, Cultural Resource Program, U.S. Department of the Interior, National Park Service. Accessed through http://www.nps.gov/hdp/standards/standards.pdf.

The River Project

2011 Early History, 1700-1920. Accessed at http://www.theriverproject.org/projects/ taylor-yard-rio-de-los-angeles-state-park/early-history-1700-1920 on June 7, 2012.
SurveyLA

2012 West Los Angeles Historic Districts, Planning Districts, and Multi-Property Resources. Available online: http://preservation.lacity.org/files/Districts_Final.pdf Accessed October 15, 2015.

Terence, Mal

1964 Two Under Way: Malls: Islands in Sea of Cars. *Los Angeles Times*, 1 November: WS1. Los Angeles, California.

United States Geological Survey [USGS]

- 1898 Santa Monica 15' Quadrangle. Reston, VA: U.S. Department of the Interior.
- 1902 Santa Monica 15' Quadrangle. Reston, VA: U.S. Department of the Interior.
- 1921 Santa Monica 15' Quadrangle. Reston, VA: U.S. Department of the Interior.
- 1926 Hollywood 7.5' Quadrangle. Reston, VA: U.S. Department of the Interior.
- 1953 Hollywood 7.5' Quadrangle. Reston, VA: U.S. Department of the Interior.

Wallace, William J.

1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214–230.

Warren, Claude N.

1968 Cultural Traditions and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by Cynthia Irwin-Williams. Eastern New Mexico University Contributions in Anthropology 1(3):1–14.

Wilkman, Nancy, and Jon Wilkman

2006 Picturing Los Angeles. Gibbs Smith Publishers, Salt Lake City.

Wiltse, Jeff

2007 Contested Waters. University of North Carolina, Chapel Hill.

Workman, Boyle

1935 *The City that Grew: As Told by Caroline Walker*. The Southland Publishing Company, Los Angeles.

Zanesville Signal

1932 Heiress Sells U.S. Short. August 19, 1932. Zanesville, Ohio.

APPENDIX A

RESUMES

Design + Planning

Résumé

Linda Kry Staff Archaeologist

AECON

Education

B.A. Anthropology, University of California Los Angeles A.A. Anthropology, Cerritos College, Norwalk, California

Publications + Technical Papers + Presentations

Ehringer, C., L. Kry, S. Dietler, and M. Strauss. 2008. After the Bones Are Gone: The Role Of Personal Effects in Identifying Unmarked Historic Burials. Poster presentation at the Society for Historical Archaeology Annual Meeting, Albuquerque, NM.

Linda Kry is an archaeologist with six years of experience in cultural resources management within Los Angeles County, Imperial County, Riverside County and the Mojave Desert. Linda has developed considerable expertise with all aspects of cultural resources investigations including managing field surveys and lab analysis. She assists in the management of cultural resources specialists who conduct various types of cultural resources compliance including phase I surveys, construction monitoring, Native American consultation, archaeological testing and treatment and prehistoric and historic resource significance evaluations.

In her current role, Linda has gained extensive experience with identification and classification of all types of historic materials including ceramics, glass bottles, metal cans, garment-related items, and coffin hardware, as well as processing artifact collections, including assessing conservation requirements and artifact reconstruction. Her work in various desert and coastal projects has broadened her experience to include the identification and recordation of prehistoric resources. In addition, Linda is proficient in historic and prehistoric record searches, general historic literature research, museum and archival research, Sanborn map research, Native American consultation, and the preparation of all related cultural resources documentation. Linda authors and co-authors technical reports and is familiar with requirements for CEQA and Section 106 compliance. Her present research interests include the historical development of Los Angeles and 19th to mid-20th century consumer practices.

Project Experience

Temple Street Widening, Los Angeles, CA

Served as an archaeological monitor during road construction and utilities relocation in downtown Los Angeles. Duties included documenting historic archaeological features, coordinating work schedules with on-site construction personnel, and maintaining detailed daily reports. Responsible for processing and sorting artifact collection.

Main Street Parking Facility and Motor Transport Division, Los Angeles, CA

Archaeological and paleontological monitor of construction site in downtown Los Angeles. Responsible for identification, recovery, and mapping of historic archaeological features, maintaining detailed daily reports, and coordinating work schedules with on-site construction foreman. Over 19 historic archaeological features dating from the 1860s to the 1920s were recovered on-site. Processed and sorted artifact collection.

Central Los Angeles High School #9, Los Angeles, CA

Duties included assessing artifact conditions and conservation needs, assisting with development and implementation of artifact cleaning procedures, assisting with artifact classification and cataloging using Excel, and reconstruction of artifacts. Over 3,000 historic-era artifacts were recovered from a 19th-century cemetery.

Alameda Street, Los Angeles, CA

Archaeological monitoring of street construction at Alameda Street in downtown Los Angeles resulted in the identification and recovery of over 300 historic-era artifacts. In addition, segments of both narrowgauge and standard gauge rail lines, sections of brick foundations, and brick irrigation features were documented. A large section of late 19th to early 20th century brick pavement and part of the Zanja were also uncovered and documented during construction.

Lakeside Recreational Complex, Sylmar, CA

Led archaeological survey and authored report on a Phase I cultural resources evaluation of the historic-era Lakeside Debris Basin property. Tasks include a California Register eligibility assessment for the facility itself and archaeological features identified as a result of the survey, and prepared a Cultural Resources Technical Report with findings and recommendations for further work, pursuant to CEQA requirements.

First Street Trunk Line, Los Angeles CA

Conducted archaeological monitoring of utilities installation, responded to monitoring discoveries including historic-period utility pipes, and determined appropriate mitigation in the form of recordation. An archaeological monitoring report will be prepared at the conclusion of the project.

Van Norman Chloramination Station, San Fernando CA

Conducted archaeological monitoring with a Native American monitor during project construction. Co-author of archaeological monitoring report that will be prepared at the conclusion of the project.

Fire Station No. 48, Seal Beach, CA

Authored a report in connection with archaeological and Native American monitoring during project construction in support of cultural resources assessment pursuant to CEQA requirements.

Topanga Library Project, Topanga Canyon, CA

AECOM conducted archaeological monitoring during construction of the Topanga Library. Construction included the installation waterlines along the roadway outside of the main project area. Monitoring resulted in the discovery of materials associated with the recorded archaeological site CA-LAN-8. Served as crew chief during archaeological testing of this site. Resources were identified and evaluated for eligibility to the National Register of Historic Places.

Solar Millennium Blythe Project, Blythe, CA

Served as Crew Chief for an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites, and recordation of field data on Department of Parks and Recreation Forms.

Solar Millennium Palen Project, Chuckwalla Valley, CA

Served as Co-Crew Chief for an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites.

South Region Elementary School #1, Los Angeles, CA

Archaeological Monitor, Lab Technician. Conducted archaeological monitoring in south-central Los Angeles. The area had been in use since 1909 and was the home of several domestic, religious, and retail establishments. Responsible for processing and sorting artifact collection.

Exposition Corridor Light Rail Transit, Los Angeles County, CA

Field Archaeologist. Photo-documented potentially historic buildings along several proposed routes for the new Exposition Light Rail in West Los Angeles, Santa Monica, and Culver City.

Woodland Duck Farm Project, El Monte, CA

Field Archaeologist. Assisted with the Phase I investigation, including a historic structure and archaeological survey of the site of the former historic Woodland Duck Farm.

Lang Ranch, Thousand Oaks, CA

Field Archaeologist. Participated in the archaeological testing of the 46-acre project area. Project work involved the archaeological testing at two artifact isolate locations to determine presence of sub-surface deposits.

Santa Anita Reservoir, Los Angeles County, CA

Field Archaeologist. Assisted with the Phase I archaeological survey of the site of the Santa Anita Dam, Reservoir and Complex.

McCoy Solar, Blythe, CA

Field Archaeologist. Assisted in an archaeological survey of a proposed solar electric generating facility in the Chuckwalla Valley. The project included an archaeological survey of the project site and buffer zones, the recordation of historic and prehistoric archaeological sites, and recordation of field data on Department of Parks and Recreation Forms.

California High Speed Train Project, Fresno, Madera, and Merced Counties, CA

Field Archaeologist. Assisted in archaeological survey of parcels for a proposed high speed train in Central California. The project included an archaeological survey of the project areas of potential effect and buffer zones, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Mojave Solar One Project, San Bernardino County, CA

Field Archaeologist. Assisted in an archaeological survey. The project included an archaeological survey of the project areas of potential effect and buffer zones, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Hansen Dam Project, Los Angeles, CA

Conducted a Phase 1 investigation comprised of an archaeological survey of the Project site, recordation of historic and prehistoric cultural resources, including features and identification of previously recorded sites. Authored an assessment report.

Dixieland TO IV 230 KV T-Line Project, Imperial County, CA

Field Archaeologist. Assisted in the archaeological survey of an alignment for a proposed transmission line. The project included an archaeological survey of the project site, the recordation of historic and prehistoric archaeological resources, and recordation of field data on Department of Parks and Recreation Forms.

Aiso Street Project, Los Angeles, CA

Served as an archaeological monitor during construction for a parking facility in downtown Los Angeles. Duties included documenting

historic archaeological features, coordinating work schedules with AECOM staff and on-site construction personnel, and maintaining detailed daily reports. Responsible for processing, sorting and cataloguing the artifact collection for curation. Also made contributions to a report documenting the Project findings and results.

Greenline Right of Way Survey, Los Angeles County, CA

Participated in archaeological field survey of the Greenline right of way from Torrance to LAX in Los Angeles. Tasks included recording of historical and archaeological resources.

Santa Anita Reservoir, Los Angeles County, CA

Assisted in a Phase I investigation, including a historic structure and archaeological survey of the site of the Santa Anita Dam, Reservoir and Complex.

ILWU Local 13 Dispatch Hall Project, Los Angeles, CA

Conducted a Phase 1 investigation comprised of an archaeological survey of the Project site and recordation of archaeological resources. Wrote up the survey results, the Sacred Lands File search results and the Native American Contact program results for the Project cultural technical memo as part of a Draft Initial Study/Mitigated Negative Declaration Report.

Alcazar Yard, Los Angeles, CA

Conducted research for historic building evaluation through the review of building permits at various Department of Building and Safety facilities in Los Angeles County and review of Sanborn Fire Insurance Maps.

St. Jude Hospital, Fullerton, CA

Conducted a survey of the project area and authored survey results.

OCTA I-5 Highway Improvements EIR, Orange County, CA

Conducted Native American contact program as part of CEQA.

New Long Beach Courthouse Project, Long Beach, CA

Served as archaeological and paleontological monitor during construction for a new courthouse in the City of Long Beach. Duties included providing worker's training regarding archaeological and paleontological resources for on-site personnel, documenting historic archaeological features and coordinating with clients and AECOM staff. Participated in the testing excavations of early twentieth century privies that were discovered during monitoring. Served as Lab Director and was responsible for directing the processing, sorting and cataloguing of the artifact collection for curation. Co-authored a report documenting the Project findings and results.

Genesis Solar, Blythe, CA

Archaeological monitoring for the Genesis solar farm project. Monitored placement of transmission lines, large scale excavation for the placement of solar panels, and caisson drilling for solar panel footings. Aspects of the project included monitoring, survey, testing, and artifact collection. Responsibilities included field lead monitor, recordation and collection of cultural resources discovered during monitoring, survey and scheduling with archaeological, Native American and construction crews.

San Fernando Valley WRP, Los Angeles County, CA

Assisted in a Phase I portion of the project. Tasks included a records search and field survey for potential archaeological resources. Project is on-going.

Civic Center Joint Use Project, Santa Monica, CA

Management of a Phase I process. Responsibilities include: a records search, survey of project area, scheduling with AECOM staff, and coauthoring the results. Project is on-going.

Selected Reports

Central Los Angeles High School #9 Archaeological Excavation Report (in progress). Prepared for Los Angeles Unified School District. AECOM. (anticipated 2011).

Hansen Dam Golf Course Water Recycling Project Phase I Archaeology Assessment Los Angeles County, California (lead author). Prepared for the Los Angeles Department of Water and Power. AECOM July 2010.

Negative Archaeological Monitoring Report for the Fire Station 48 Replacement Project City of Seal Beach, California (lead author). Prepared for the City of Seal Beach. AECOM August 2010.

Draft Archaeological Assessment for the Temple Street Widening Project

City of Los Angeles, California (contributing author). Prepared for Los Angeles Department of Public Works-Engineering. AECOM December 2009.

Phase I Cultural Resources Assessment for the Topanga Underground Utility District Project City of Topanga, California (contributing author). Prepared for the Los Angeles County Department of Public Works. AECOM April 2011.



Environment

Resume

Marc A. Beherec, PhD, RPA Archaeologist Cultural Resources Group Leader

Education

PhD, Anthropology, University of California, San Diego, La Jolla, CA, 2011 MA, Anthropology, University of California, San Diego, La Jolla, CA, 2004 BA, Anthropology (Geology minor), University of Texas, Austin, Austin, TX, 2000

Professional Registration Register of Professional Archaeologists (RPA)

Professional Affiliations

Member, Society for American Archaeology Member, Society for California Archaeology Dr. Marc Beherec is an archaeologist who has been involved in the field of cultural resources management for nearly fifteen years. He has worked throughout the southwest on projects within Federal and State regulatory framework, and is experienced in the identification and analysis of both prehistoric and historic era artifacts. Dr. Beherec also has extensive experience in Paleoindian and Archaic period sites in the western US and has taken part in large-scale excavations in Jordan. Over the past three years, he has served as Monitoring Coordinator and Lead Monitor for the NextEra Genesis Solar Energy Project and for the Los Angeles Metropolitan Transportation Authority's large Regional Connector and Crenshaw rail projects. At the same time, he has written cultural resources assessments for several clients.

Dr. Beherec also serves as Cultural Resources team leader for Los Angeles. In this capacity he manages a team of three full-time archaeologists and numerous project-specific part-time employees and subcontractors conducting work across the Greater Los Angeles area.

Selected Project Experience

Los Angeles Metropolitan Transportation Authority Compliance Monitoring

Monitoring Coordinator for the cultural resources compliance monitoring of multiple projects within the greater Los Angeles area, including the 8.5-mile Crenshaw rail transit corridor and associated stations and the 1.9-mile Regional Connector subway corridor and associated stations. Tasks involve instructing construction team in cultural resources compliance; the scheduling and coordination of multiple concurrent Native American and archaeological monitors on diverse construction efforts throughout the metropolitan area; compilation, QA/QC, and delivery of daily monitoring logs and other documentation for all on-site monitors; serving as a liaison between archaeological monitors, construction crew, and client project team; preparing weekly and monthly reports of activities and findings; and ensuring overall cultural resources compliance within the permitted conditions of the project.

Los Angeles Department of Water and Power; City of Los Angeles Bureau of Engineering; Water Replenishment District of Southern California; Los Angeles Metropolitan

Transportation Authority; City of Orange; City of Santa Ana; Archaeologist for test excavations at Camp Swift Army National Port of Los Angeles

Cultural Resources Assessments

Assessed sites for pumping stations, pipelines, and other infrastructure improvements in compliance with CEQA and CEQA Plus. Tasks included archival research including researching known sites at the South Central Coastal Information Center at California State University, Fullerton; conducting archaeological and built environment surveys: assessing finds for inclusion on the California Register of Historic Places; writing reports of findings.

NextEra Genesis Solar Energy Project Cultural Resources **Compliance Monitoring**

Monitoring Coordinator and Lead Monitor for the cultural resources compliance monitoring of a 2000-acre solar power project under the jurisdiction of the California Energy Commission and Bureau of Land Management (BLM) on BLM land in the western Mojave Desert. Tasks involve the scheduling and coordination of between 5 and 20 concurrent archaeological monitors on diverse construction efforts throughout the project site; compilation, QA/QC, and delivery of daily monitoring logs for all on-site monitors; attending project construction scheduling and Health and Safety meetings; conducting and documenting daily monitoring crew Health and Safety meetings; serving as liaison between archaeological monitors, construction crew and client project team; ensuring overall cultural resources compliance with the permitted conditions of the project.

San Bernardino National Forest San Jacinto District Archaeologist, Idyllwild, CA

Archaeologist assigned to Idyllwild Ranger Station, San Jacinto District, San Bernardino National Forest, Riverside County, California. Over the course of one year, assisted District Archaeologist in cultural resources efforts, including supervision of crews conducting cultural resources inventories of mountainous terrain, GPS documentation of resources, preparation of DPR 523 forms, research of prehistoric and historic artifact parallels, including projectile point typologies, makers' marks, and tin can typologies, and authoring technical reports. Work was performed before joining this firm.

Border Field State Park, San Diego County, CA

Excavated coastal Early Archaic sites in and adjacent to Border Field State Park in conjunction with the construction of the Mexico-United States Border Barrier. Work was performed before joining this firm.

Lake Meredith National Recreational Area Cultural **Resources Surveys, Amarillo, TX**

Archaeologist for intensive pedestrian surveys of the Lake Meredith National Recreational Area, an area along the Canadian River with documented human occupation for over 12,000 years. Relocated previously documented archaeological sites and documented newly identified sites. Work was performed before joining this firm.

East Texas Pipeline Survey, Rural East Texas

Crew Chief for intensive pedestrian survey of a new east Texas pipeline corridor. Efforts included field survey, shovel testing, site recordation, and GPS operation. Work was performed before joining this firm.

Camp Swift Archaeological Project, Bastrop, TX

Guard Base. Excavated test units at eighteen sites, documented excavations, and drilled rock cores for archaeomagnetic dating research. Work was performed before joining this firm.

Gault Site Archaeological Project, Bell County, TX

Excavated at the Gault Paleoindian site (41BL323), completed documents (unit forms and maps, profile maps, Munsell notations, artifact catalogs), conducted preliminary lithic analysis, measured lithic blades for statistical studies, and supervised student volunteers in washing lithics. Work was performed before joining this firm.

Environment

Trina Meiser Senior Historic Preservation Planner

Education

MA, Historic Preservation Planning, Cornell University BA, History, Kenyon College

Technical Specialties

AECOA

Architectural History Historic Architectural Assessment Historic Preservation Planning NHPA Section 106 Consultation NEPA Compliance Trina Meiser is a historic preservation planner and meets the Secretary of Interior's qualifications (36 CFR Part 61) in architectural history and history. Ms. Meiser has more than 10 years of experience in identifying and planning for cultural resources, including historic structures, districts, and landscapes. She specializes in technical analysis to support regulatory compliance, specifically under Section 106 of the National Historic Preservation Act and the National Environmental Policy Act (NEPA). She conducts cultural resources studies, including inventory, survey, and evaluation reports; impacts analyses and findings of effect; National Register of Historic Places (NRHP) nominations; and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documents. She consults on a variety of rehabilitation, transportation, energy, military, and community projects with clients, designers, and agencies. Her experience in historic preservation provides a strong understanding of federal, state, and local regulations and a thorough knowledge of the Secretary of the Interior's Standards for the Treatment of Historic Properties and their function in architectural design and historic preservation planning.

Project Experience

National Capital Planning Commission, Redevelopment of the Carnegie Library at Mount Vernon Square, Washington, DC

Preparing historic architectural survey report and impacts analysis for the Section 106 process and the environmental assessment (EA) for the undertaking. Assessing existing character-defining features and integrity to analyze potential adverse effects and to recommend appropriate treatments for the redevelopment.

Department of State, Potomac Annex Buildings 1, 3-4, and 5 Rehabilitation Projects, Washington, DC

Performed a conditions assessment of Buildings 1, 3-4, and 5 in the Potomac Annex Historic District to assess existing character-defining features and integrity. Prepared analysis of potential adverse effects that recommends appropriate treatments to maintain the property's integrity as part of rehabilitation efforts under the Section 106 process.

National Park Service, Jefferson National Expansion Memorial, St. Louis, MO

Performed research and prepared portions of the historical context the Native American occupation, the French colonial establishment, and the 19th century development of the built environment for the General Master Plan/EIS.

National Aeronautics and Space Administration (NASA), NASA Ames Research Center Integrated Cultural Resources Management Plan (ICRMP) and Center-wide Programmatic Agreement, Moffett Field, CA

For NASA, preparing an ICRMP for the Ames Research Center, including the NAS Sunnyvale Historic District. Coordinating with NASA staff to develop best practices for the management of cultural resources. Also drafting the Programmatic Agreement between NASA, CA SHPO, and consulting parties for the streamlined treatment of historic properties.

NASA, NRHP Nominations for Various Properties at Ames Research Center, Moffett Field, CA

Preparing NRHP nominations for several properties at the Ames Research Center, including the new Ames Wind Tunnel Historic District, the Administration Building, and the Arc Jet Laboratory.

AMTRAK, Pennsylvania Station Conditions Assessment, Baltimore, Maryland.

Conducted State of Good Repair assessment of Amtrak's historic Baltimore Pennsylvania Station. Consultation services included analysis of historic materials, and recommendations for the preservation of character-defining features in the rehabilitation of the building to meet the Secretary of Interior's Standards.

California High Speed Rail Authority, California High Speed Train Project, Merced to Fresno Segment, Central CA

Inventoried and evaluated more than 400 properties in Merced, Madera, and Fresno Counties in compliance with Section 106. Evaluations were conducted under a Programmatic Agreement between the State Historic Preservation Office and the California High-Speed Train Authority.

Expo Authority, Exposition Corridor Transit Project Phase 2, Los Angeles County, CA Prepared technical report for the evaluation of historical resources and the cultural resources portion of environmental impact statement/report. Elements for Section 106 consultation included the requesting determination of cultural resources and proposing mitigation measures for the treatment of historic properties.

Chicago Transit Partners (CTP)/Federal Transit Administration (FTA), Wilson Transfer Station Project, Chicago, IL

Provided consultation on historic properties affected by a project to rehabilitate the Wilson Station on the Chicago Transit Authority (CTA) Red Line elevated train. Prepared survey documentation and revisions to the EA and Memorandum of Agreement (MOA) between CTA and the SHPO. Prepared Section 4(f) analysis of effects to historic properties.

Wisconsin Department of Transportation (WisDOT), County Trunk Highway G Widening Project, Rock County, WI

Conducted an evaluation of potential historic properties along a portion of County Trunk Highway G in Rock County, Wisconsin. Consulted with designers on avoidance of historic properties and prepared Determination of Eligibility analysis and Finding of No Adverse Effect analysis of an 1890 oneroom school house that appears eligible for the NRHP in compliance with Section 106.

Los Angeles County Metropolitan Transportation Authority (LACMTA) /FTA, Regional Connector Cultural Resources Mitigation Management Plan and HABS, Los Angeles, CA Under on-call contract, prepared mitigation management plan to fulfill requirements set forth in an MOA and EIS/EIR for the project to connect two light-rail transit lines in downtown Los Angeles. Prepared HABS CA-2907 documentation of the Atomic Café in Little Tokyo, Los Angeles.

LACMTA, Lankershim Depot Project, Los Angeles, CA

Under on-call contract, provided consultation services and review of architectural plans and construction to determine whether the project to rehabilitate a late 19th century railroad depot is in adherence with the Secretary of Interior's Standards. Consultation services under LACTMA master contract.

LACMTA, Los Angeles Union Station HVAC and Roofing Replacement Project, Los Angeles, CA

Provided consultation services and review of architectural plans and construction to determine whether the project to replace the roof and mechanical systems of the historic train station is in adherence with the Secretary of Interior's Standards. Consultation services under LACMTA master contract.

LACTMA, South Bay Metro Green Line Extension Project, Los Angeles County, CA

Conducted cultural resources technical studies for transportation project through metropolitan LA to meet Section 106 requirements. Prepared technical report and the cultural resources portion of the EIS/EIR, including mitigation measures for the treatment of evaluated historical resources.

US Navy, MCAS Operations Complex, Marine Corps Base Hawaii, Kaneohe, HI

Provided historic imagery for display in the new MCAS Operations Complex Terminal building at Kane'ohe. Collected replicated historic photographs from repositories including MCBH, the Hawaii State Archives, the Bishop Museum, and the National Archives. Located and procured specific historic photographs and copyright releases from the personal collections of World War II veterans.

US Navy, Cultural Landscape Report for Marine Corps Training Area Bellows, Waimanalo, HI

Conducted research at local and national repositories to locate historical records and documentation of the physical development of MCTAB landscape, from the pre-contact era through its period of significance as a military installation. Prepared the historical narrative in the cultural landscape report for context to evaluate remaining character-defining features and integrity of World War II airfield features.

US Navy, Historic Landscape Report for Camp Smith, Aiea Heights, HI

Prepared the historical narrative of the physical development of the Camp Smith landscape, specifically its transformation from agricultural fields during the plantation era to a therapeutic campus of the Aiea Heights Naval Hospital. Contributed context to the historic landscape report to evaluate remaining character-defining features and integrity of the hospital facility features. Conducted primary research at local and national repositories.

US Navy, Naval Base Kitsap Bremerton, Keyport, Indian Island, and Bangor Integrated Cultural Resources Management Plans (ICRMP), Bangor, WA

For Naval Facilities Engineering Command (NAVFAC), Atlantic Division, prepared Integrated Cultural Resources Management Plans for facilities at Naval Base Kitsap that outline management policies for World War II- and Cold Warera buildings and surveys under Section 110 of NHPA. Coordinated with NAVFAC staff to develop best practices for the management of cultural resources.

US Navy, Naval Base Point Loma Integrated Cultural Resources Management Plan (ICRMP), San Diego, CA For NAVFAC, Southwest Division, prepared ICRMP for facilities at Naval Base Point Loma and evaluating World War II- and Cold War-era buildings. Coordinated with NAVFAC staff to develop best practices for the management of cultural resources on the naval base.

US Navy, Cultural Resources Survey of Andersen Air Force Base Cantonment Areas and Naval Base Guam, Guam

For NAVFAC Pacific, recorded and evaluated Cold War-era housing, recreational facilities, and infrastructure located at Andersen Air Force Base and Naval Base Guam. Conducted archival research with review of period building plans and historic maps. Prepared findings for contribution to a facility-wide cultural resources report.

US Navy, Historical Assessment for le Shima Training Facility, le Shima, Okinawa, Japan

For Naval Facilities Engineering Command (NAVFAC) Pacific, recorded and evaluated ruins of a World War II-era air base, including the foundations of a 19th-century lighthouse and a system of runways. Prepared findings for contribution to a facility-wide cultural resources report.

US Navy, National Register Eligibility Assessment for Naval Base China Lake, China Lake, CA

For Naval Facilities Engineering Command (NAVFAC) Southwest, recorded and evaluated various unrecorded buildings in the NRHP-eligible China Lake Pilot Plant Historic District at Naval Weapons Station China Lake for eligibility to the NRHP. Completed inventory forms and a technical report.

US Veterans Administration, Veterans Affairs Medical Center (SFVAMC) Seismic Upgrade Project, San Francisco, CA Consulted with architects and designers for the rehabilitation and seismic retrofit of the 1930s-era Art Deco SFVAMC buildings. Evaluated design of new additions and alterations to contributing buildings to a National Registerlisted historic district. Engaged in Section 106 consultation with the SHPO.

US Coast Guard, Los Angeles Harbor Light Station Rehabilitation Project, San Pedro, CA

Under IDIQ contract, evaluated potential adverse effects to NRHP-listed "Angel's Gate" lighthouse. Conducted historical research to determine historically significant and characterdefining features. As consultant to US Coast Guard, prepared Finding of No Adverse Effect for Section 106 consultation.

US Coast Guard, Cape Arago Lighthouse Mothballing Project, Chief's Island, OR

Under IDIQ contract, prepared a Conditions Assessment with management recommendations for the Cape Arago Lighthouse as part of a mothballing plan. After assessing building materials of the lighthouse, applied technical guidance to identify appropriate treatments for preliminary maintenance prior to mothballing.

GSA, San Ysidro Land Port of Entry Historic Customs House Rehabilitation Project, San Diego, CA

Consulted with architects to ensure environmental compliance with the Secretary of Interior's Standards in rehabilitation project design of NRHP-listed Historic Customs House. Prepared documentation for Section 106 consultation.

Lowe Enterprises, LLC, Town and Country Redevelopment Project, San Diego, CA

Preparing Historical Resources Technical Report according to the City of San Diego's guidelines for the evaluation of historical resources. This task includes evaluating several buildings with varying architectural styles and periods of significance, and the assessment of impacts to historical resources for an environmental impact report.

City of San Diego, World Trade Center Rehabilitation Project, San Diego, CA

Evaluated the condition and integrity of the 1928 Art Decostyle San Diego Athletic Club. Prepared documentation in support of CEQA and Section 106 consultation on behalf of the City of San Diego under requirements of the Department of House and Urban Development.

City of San Marcos General Plan Update, San Marcos, CA

Assisted with the comprehensive update of the San Marcos General Plan informed by the AECOM's Sustainable Systems Integration Model (SSIM), for cultural resources. Assisted with the preparation of land use alternatives that preserve the City's character while allowing new pedestrian-friendly, mixed-use development in key focus areas of the City, and analyzed potential impacts to historic resources associated with adoption and implementation of the City's updated General Plan.

California Department of Transportation (Caltrans), State Route 94 Express Lanes Project, San Diego, CA

As project manager for cultural resources studies, conducted historic and archaeological surveys and evaluations of resources within the Area of Potential Effects for a segment of State Route 94 widening in a highly urbanized area of San Diego. Prepared Historic Property Survey Report and Historical Resources Evaluation Report to Caltrans standards.

Caltrans, State Route 76 Mission to Interstate 15 Historical Resources Evaluation Report, San Diego County, CA

Conducted fieldwork to record and evaluate ranching buildings and residences. Prepared the Historical Resources Evaluation Report per Caltrans standards for the evaluation of historical resources for eligibility to the National Register and California Register.

Caltrans, Interstate 5/State Route 56 Project, San Diego, CA Conducted supplemental cultural resources studies for the project located in San Diego County. Surveyed resources within the Area of Potential Effects to analyze potential impacts to historical resources. Summarized findings in the Historical Resources Evaluation Report and Historic Property Survey Report per Caltrans standards.

Caltrans, Orangethorpe Avenue Grade Separation Project, Orange County, CA

Conducted cultural resources studies for the project located in an urbanized area in the cities of Placentia and Anaheim in northeastern Orange County. Evaluated resources within an Area of Potential Effects to recommend eligibility to the National Register and California Register, and completed the Historical Resources Evaluation Report per Caltrans standards.

Caltrans, Raymond Avenue Grade Separation Project, Orange County, CA

Conducted fieldwork to record and evaluate historic resources within the project's Area of Potential Effects located along a primary arterial highway in Fullerton. Completed the Cultural Resources Survey Report with recommendations on eligibility to the National Register and California Register.

County of San Diego, South Santa Fe Avenue Reconstruction Project – South Segment, San Diego County, CA

Completed the Historic Property Survey Report and Historical Resources Evaluation Report per Caltrans standards to analyze resources and recommend eligibility to the National Register and California Register. Results were recorded on Department of Parks and Recreation 523 forms.

County of San Bernardino, Shadow Mountain Grade Separation Project, San Bernardino County, CA

Prepared technical report for the evaluation of historical resources along a portion of Historic Route 66 in San Bernardino County. Evaluated more than 10 resources and assessed impacts to historical resources.

County of San Diego, Rancho Santa Fe Roundabouts Project, Rancho Santa Fe, CA

Assessed significant impacts to the significant resource, the community of Rancho Santa Fe, in a Historical Resources Evaluation Report Addendum and Historic Property Survey Report. Established the historic character-defining features to be preserved in compliance with the Secretary of Interior's Standards.

County of San Diego, West Mission Bay Drive Bridge Project, San Diego, CA

Conducted supplemental cultural resources studies for the bridge improvement project located in San Diego County. Surveyed resources within the Area of Potential Effects to analyze potential impacts to historical resources. Summarized findings in the Historical Resources Evaluation Report and Historic Property Survey Report per Caltrans standards.

Federal Emergency Management Agency (FEMA), Hurricane Katrina Recovery, Disaster 1604-DR-MS, Biloxi, MS

Recorded and photo-documented the condition and integrity of properties affected by Hurricane Katrina. Evaluated structures to recommend significance and eligibility for NRHP listing. Completed project review of restoration and rehabilitation projects for compliance with federal regulations and programmatic agreements coordinated with the Mississippi SHPO. [Prior to AECOM]

R.H. Adcock, Architect & Associates, Various Projects in San Diego, CA, Las Vegas, NV, and Aurora, CO

As a Technical Associate, performed construction defects analysis of recent-construction architecture based on site visit observations, results of invasive testing, and review of the Uniform Building Code and other standards. Conditions assessments were generally used as depositions in legal suits. [Prior to AECOM]

APPENDIX B

NATIVE AMERICAN CONTACT PROGRAM



September 25, 2015

Katy Sanchez Native American Heritage Commission 1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 nahc@nahc.ca.gov

Subject: Rancho Cienega Sports Complex Project - Sacred Lands File Search

Dear Ms. Sanchez:

AECOM, Inc. has been retained by the City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to request that the Native American Heritage Commission conduct a Sacred Lands File search for the Rancho Cienega Sports Complex Project. The proposed project is located within the Hollywood 1966 (Photo revised 1981) United States Geological Survey (USGS) 7.5-minute quadrangle maps, and is indicated on the enclosed map (Enclosure 1).

The City of Los Angeles proposes to construct a new sports complex in the City of Los Angeles District 10 in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The 30-acre regional park is located directly south of the Metro Expo Line light rail transit system and directly west of Dorsey High School. The park programs have outgrown the aging gymnasium and pool facilities. Both aforementioned facilities also have aging infrastructure that has developed into a maintenance concern. Additionally, the pool no longer fits the standards for competition pools.

The Project would be implemented in two phases. Phase 1 includes demolition and hazardous materials abatement, grading, pile installation and foundation construction for all proposed structures, utility installations, building construction, parking lot grading, and landscape and site improvements. In addition, several buildings would be constructed during Phase 1 and include a new pool and bath house, including a community room and fitness annex on the second floor, would be approximately 25,000 square feet. A new gymnasium, including office space, a running path, and a lookout deck on the second floor, would be approximately 24,000 square feet. New tennis shops and restroom would be approximately 1,900 square feet. Additionally, a new stadium viewing area would include a concession stand, restrooms, and a ticket booth, totaling 4,000 square feet.

Phase 2 of the Project consists of demolition and hazardous materials abatement of an existing maintenance yard, grading for the parking lot and new maintenance yard, utility adjustments and necessary upgrades, construction of the new maintenance yard and various site improvements, and installation of landscaping and hardscaping.

The goal of this letter, in addition to acquainting you with this project, is to request that you check the Sacred Lands File records to identify any previously recorded sites in the project area.

Thank you for your assistance. Please feel free to contact me if you have any questions about this project.



Sincerely,

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Marc A. Beherec, Ph.D., RPA Archaeologist AECOM 515 S. Flower St., 8th Floor, Los Angeles, CA 90071 <u>Marc.Beherec@aecom.com</u> Office: 213-593-8481 or Cell: 951-296-7561

Enclosure:

1) Project Area Map



Project Location Map

Scale: 1:24,000 Rancho Cienega Sports Complex Project Path: C:\Projects\60440382.1 Rancho Cienega Sports Complex\GIS\MXD\FigNAHC_LABOE_RanchoCienega_NAHC_20150924.mxd, 9/24/2015, StevensonA1

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 (916) 373-3710 (916) 373-5471 FAX



October 7, 2015

Marc A. Beherec AECOM 515 S. Flower St., 8th Floor Los Angeles, CA 90071

Sent by Email: Marc.Beherec@aecom.com Number of Pages: 3

RE: Rancho Clenega Sports Complex Project, Hollywood USGS Quadrangle, Los Angeles County

Dear Mr. Beherec:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.1, 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

- 1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
- 2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measurers.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

- 3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A SFL search was completed with negative results.
- 4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
- 5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: rob.wood@nahc.ca.gov.

Sincerely,

Rob Wood Associate Governmental Program Analyst

Native American Heritage Commission Tribal Consultation List Los Angels County October 7, 2015

Soboba Band of Mission Indians Rosemary Morillo, Chairperson; Attn: Carrie Garcia P.O. Box 487 San Jacinto , CA 92581 Cahuilla carrieg@soboba-nsn.gov (951) 654-2765 Gabrielino /Tongva Nation Sam Dunlap, Cultural Resources Director P.O. Box 86908 Gabrielino Tongva Los Angeles CA 90086 samdunlap@earthlink.net (909) 262-9351

Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel , CA 91778 GTTribalcouncil@aol.com (626) 483-3564 Cell

Gabrielino Tongva Indians of California Tribal Council Robert F. Dorame, Tribal Chair/Cultural Resources P.O. Box 490 Gabrielino Tongva Bellflower , CA 90707 gtongva@verizon.net (562) 761-6417 Voice/Fax

Gabrielino-Tongva Tribe Linda Candelaria, Co-Chairperson 1999 Avenue of the Stars, Suite 1100 Los Angeles , CA 90067

Gabrielino

(626) 676-1184 Cell

Gabrieleno Band of Mission Indians - Kizh Nation Andrew Salas, Chairperson P.O. Box 393 Covina , CA 91723 gabrielenoindians@yahoo.com Gabrielino (626) 926-4131

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code. This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed

Rancho Clenega Sports Complex Project, Hollywood USGS Quadrangle, City of Los Angeles.



October 12, 2015

Rosemary Morillo, Chairperson Soboba Band of Mission Indians Attn: Carrie Garcia P.O. Box 487 San Jacinto, CA 92581

Subject: Rancho Cienega Sports Complex Project

Dear Chairperson Morillo:

AECOM, Inc. has been retained by City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to conduct a cultural resources assessment for the Rancho Cienega Sports Complex Project. At our request, the Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area.

The proposed project is located on the Hollywood 1966 (Photo revised 1981) California United States Geological Survey (USGS) 7.5-minute quadrangle map (Enclosure 1).

The City of Los Angeles proposes to construct a new sports complex in the City of Los Angeles District 10 in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The park programs have outgrown the aging gymnasium and pool facilities. Both aforementioned facilities also have aging infrastructure that has developed into a maintenance concern. Additionally, the pool no longer fits the standards for competition pools.

The Project would be implemented in two phases. Phase 1 includes demolition and hazardous materials abatement, grading, pile installation and foundation construction for all proposed structures, utility installations, building construction, parking lot grading, and landscape and site improvements. In addition, several buildings would be constructed during Phase 1 and include a new pool and bath house, including a community room and fitness annex on the second floor, would be approximately 25,000 square feet. A new gymnasium, including office space, a running path, and a lookout deck on the second floor, would be approximately 24,000 square feet. New tennis shops and restroom would be approximately 1,900 square feet. Additionally, a new stadium viewing area would include a concession stand, restrooms, and a ticket booth, totaling 4,000 square feet.

Phase 2 of the Project consists of demolition and hazardous materials abatement of an existing maintenance yard, grading for the parking lot and new maintenance yard, utility adjustments and necessary upgrades, construction of the new maintenance yard and various site improvements, and installation of landscaping and hardscaping.

The goal of this letter, in addition to acquainting you with this project, is to request any information you have that may indicate an impact to cultural resources within the project area. The response form (Enclosure 2) is provided to help us identify and address your concerns with this project. Return of this form does not imply that you approve or disapprove of the project; nor does it limit your opportunity to comment at a later time. Please return the response form to the address shown below in the self-addressed stamped envelope (Enclosure 3), no later than November 12, 2015 so that we may include your concerns in our document.



Thank you very much for your assistance. Please feel free to contact me if you have any questions about this project.

Sincerely,

Mon a Bolera

Marc A. Beherec, Ph.D., RPA AECOM Archaeologist <u>marc.beherec@aecom.com</u> Desk: 213-593-8481 Cell: 951-296-7561

Enclosures:

- 1) Project Area Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Project Location Map

Scale: 1:24,000 Rancho Cienega Sports Complex Project Path: C:\Projects\60440382.1 Rancho Cienega Sports Complex\GIS\MXD\FigNAHC_LABOE_RanchoCienega_NAHC_20150924.mxd, 9/24/2015, StevensonA1



September 24, 2015

Anthony Morales, Chairperson Gabrielino/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778

Subject: Rancho Cienega Sports Complex Project

Dear Chairperson Morales:

AECOM, Inc. has been retained by City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to conduct a cultural resources assessment for the Rancho Cienega Sports Complex Project. At our request, the Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area.

The proposed project is located on the Hollywood 1966 (Photo revised 1981) California United States Geological Survey (USGS) 7.5-minute quadrangle map (Enclosure 1).

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Thank you very much for your assistance. Please feel free to contact me if you have any questions about this project.

Sincerely,

Mon a Bolera

Marc A. Beherec, Ph.D., RPA AECOM Archaeologist <u>marc.beherec@aecom.com</u> Desk: 213-593-8481 Cell: 951-296-7561

Enclosures:

- 1) Project Area Map
- 2) Response Form
- 3) Self-Addressed Stamped Envelope



Project Location Map

Scale: 1:24,000 Rancho Cienega Sports Complex Project Path: C:\Projects\60440382.1 Rancho Cienega Sports Complex\GIS\MXD\FigNAHC_LABOE_RanchoCienega_NAHC_20150924.mxd, 9/24/2015, StevensonA1

NATIVE AMERICAN RESPONSE FORM

Please circle appropriate response below.

I/We (would like) (would not like) to be contacted. You may contact me/us at the address and phone number below.

I/We (do) (do not) have concerns. They are outlined below:

Please Print Name, Tribal Office/Affiliation, Address, and Phone Number

Signature

Date

Please return completed form no later than October 25, 2015 to:

Marc A. Beherec, Ph.D., RPA Archaeologist AECOM 515 S. Flower St., 8th Floor, Los Angeles, CA 90071 Marc.Beherec@aecom.com



September 24, 2015

Robert F. Dorame, Tribal Chair/Cultural Resources Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707

Subject: Rancho Cienega Sports Complex Project

Dear Mr. Dorame:

AECOM, Inc. has been retained by City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to conduct a cultural resources assessment for the Rancho Cienega Sports Complex Project. At our request, the Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area.

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September 24, 2015

Linda Candelaria, Co-Chairperson Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067

Subject: Rancho Cienega Sports Complex Project

Dear Co-Chairperson Candelaria:

AECOM, Inc. has been retained by City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to conduct a cultural resources assessment for the Rancho Cienega Sports Complex Project. At our request, the Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area.

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September 24, 2015

Andrew Salas, Chairperson Gabrielino Band of Mission Indians – Kizi Nation P.O. Box 393 Covina, CA 91723

Subject: Rancho Cienega Sports Complex Project

Dear Chairperson Salas:

AECOM, Inc. has been retained by City of Los Angeles Department of Public Works, Bureau of Engineering (BOE) to conduct a cultural resources assessment for the Rancho Cienega Sports Complex Project. At our request, the Native American Heritage Commission conducted a Sacred Lands File search for the project, and identified you as an individual who may have knowledge of cultural resources in or near the project area.

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September 24, 2015

Sam Dunlap, Cultural Resources Director Gabrielino/Tongva Nation P.O. Box 86908 Los Angeles, CA 90086

Subject: Rancho Cienega Sports Complex Project

Dear Mr. Dunlap:

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September 24, 2015

Bernie Acuna, Co-Chairperson Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067

Subject: Rancho Cienega Sports Complex Project

Dear Co-Chairperson Acuna:

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September 24, 2015

Conrad Acuna Gabrielino-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067

Subject: Rancho Cienega Sports Complex Project

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September 25, 2015

John Tommy Rosas, Tribal Admin. Tongva Ancestral Territorial Tribal Nation tattnlaw@gmail.com

Subject: Rancho Cienega Sports Complex Project

Dear Mr. Rosas:

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September 24, 2015

Sandonne Goad, Chairperson Gabrielino/Tongva Nation 106 ½ Judge John Aiso Street Los Angeles, CA 90012

Subject: Rancho Cienega Sports Complex Project

Dear Chairperson Goad:

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- 2) Response Form
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Beherec, Marc

From:	Andy <gabrielenoindians@yahoo.com></gabrielenoindians@yahoo.com>
Sent:	Wednesday, September 30, 2015 11:51 AM
То:	Beherec, Marc
Cc:	Christina Swindall Martinez. Kizh Gabrieleno; Samantha Lemos; Barbra Lonsdale
Subject:	Rancho cienega sports complex project.
Attachments:	FullSizeRender.jpg; ATT00001.txt; FullSizeRender.jpg; ATT00002.txt

Dear Marc A. Beherec AECOM

This is in regards to the above project location :

The project location is within sacred village sites and is known to be highly sensitive . I have attached a map of just some of the major villages within or near the project location. Please keep in mind these are only major villages exactly how how major cities are known today. There were many smaller villages which inhabited the large Cities and are not shown on this map. Therefore because of the sensitivity we would like to request one or two of our trained monitors to be on site during all ground disturbances.

:Field Methods

At least One Native American Monitor will be present during ground disturbing activities (including but not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching) within the project area. The Native American Monitor will complete monitoring Longs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, Soil and any cultural materials identified. The monitor will photodocument the ground disturbing activities. Thank you for your time Andrew Salas Gabrieleño Band of Mission Indians





Path: C: Projects 60443424 LADWP Headworks West Reserv

LADWP Hood

Beherec, Marc

From:	Beherec, Marc
Sent:	Thursday, October 08, 2015 5:25 PM
То:	'Andy'
Cc:	Christina Swindall Martinez. Kizh Gabrieleno; Samantha Lemos; Barbra Lonsdale
Subject:	RE: Rancho cienega sports complex project.

Dear Mr. Salas,

Thank you very much for your response. We are including your concerns in our report.

I noticed, however, that the appended map shows the San Fernando Valley, rather than our project area. Is there another map you would also like to submit?

Either way, we will include your concerns and request for monitoring in our report.

Sincerely,

Marc ---Marc A. Beherec, Ph.D., RPA Archaeologist AECOM 515 S. Flower St., 8th Floor, Los Angeles, CA 90071 Office: 213-593-8481 Cell: 951-296-7561

-----Original Message-----From: Andy [mailto:gabrielenoindians@yahoo.com] Sent: Wednesday, September 30, 2015 11:51 AM To: Beherec, Marc Cc: Christina Swindall Martinez. Kizh Gabrieleno; Samantha Lemos; Barbra Lonsdale Subject: Rancho cienega sports complex project.

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Beherec, Marc

From:	Andy <gabrielenoindians@yahoo.com></gabrielenoindians@yahoo.com>
Sent:	Thursday, October 08, 2015 7:49 PM
То:	Beherec, Marc
Cc:	Christina Swindall Martinez. Kizh Gabrieleno; Samantha Lemos; Barbra Lonsdale
Subject:	Re: Rancho cienega sports complex project.
Attachments:	image1.jpeg; ATT00002.txt

My Bad sorry !! Muangna & Chauenga would be the villages that have more of a impacted . Thanks Marc good eye.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Anthony Morales

Phone # (626) 483-3564

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Mr. Morales was interested in the impacts of the project and whether or not they would be building houses or other structures or keeping the nature of the recreation center in tact. Further, Mr. Morales stated that the entire area is known to be culturally sensitive and may have contained villages and other places that Native people used. Mr. Morales requested that we provide him with what we know about the cultural resources in the area and was interested in our recommendations for the project. I let Mr. Morales know that I did not have that information at the moment but that I would find it and get back to him.

After talking with Marc Beherec I was able to respond to the request of Mr. Morales. I informed him that prehistoric cultural resources had been identified in the project vicinity but not in the APE and that we were considering recommending archaeological monitoring. Mr. Morales stated that even though no prehistoric cultural resources had been identified in the APE he considers additional cultural landscape elements to make his determination about cultural sensitivity. These elements include the location of the project in an area considered closer to the west where there is a high presence of known village sites and higher populations in the past, the proximity of the project to the I-10 freeway which likely follows major travel ways used by people in the past, and the likely presence of known historic or present waterways that would suggest past use, as well as open (See Next Page)

Follow Up

Items Discussed (Continued):

spaces that still contain indigenous plant species that people would have used for medicine, food, and other resources. Based on this, Mr. Morales suggested that a Native American monitor should be present during ground disturbance activities due to the proximity of known prehistoric sites. Mr. Morales also suggested that, as the Gabrieleno/Tongva San Gabriel Band of Mission Indians has an established working relationship with AECOM on other projects in the area, that this group be contacted for monitoring activities.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Robert Dorame

Phone # (562) 761-6417

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Mr. Dorame requested that we resend the letter and project area map via email so that he can respond to our consultation request. I let him know that I would follow up on this immediately.

Hill, Allison

From:Hill, AllisonSent:Friday, October 09, 2015 1:41 PMTo:'gtongva@verizon.net'Cc:Beherec, MarcSubject:Rancho Cienega Sports Complex ProjectAttachments:FigNAHC_LABOE_RanchoCienega_NAHC_20150924.pdf; R Dorame.pdf

Dear Mr. Dorame,

Following up on our phone call regarding the Rancho Cienega Sports Complex Project, attached are the letter that was sent out on September 25, 2015 as well as the Project Area map.

Also, if you would prefer we can send consultation letters and maps for future projects through email if it would be more convenient for you. Please just let us know your preference.

If you have any comments or concerns, please contact Marc Beherec at:

Phone: 213.593.8481 Email: marc.beherec@aecom.com

Sincerely,

Allison Hill, B.A. Archaeologist allison.hill@aecom.com



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Linda Candelaria

Phone # (626) 676-1184

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Called Linda Candelaria but did not reach her. Left a voice mail for Ms. Candelaria informing her of the project and letting her know that she can contact Marc Behrec if she has any questions.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Sam Dunlap

Phone # (909) 262-9351

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Called Sam Dunlap but did not reach him. Left a voice mail for Mr. Dunlap informing him of the project and letting him know that he can contact Marc Behrec if he has any questions.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Bernie Acuna

Phone # (310) 428-5690

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Called Bernie Acuna but did not reach him. Left a voice mail for Mr. Acuna informing him of the project and letting him know that he can contact Marc Behrec if he has any questions.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Conrad Acuna

Phone # NA

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Information provided by the NAHC did not provide a phone number or an email address to reach Mr. Acuna at. We were not able to follow up our letter with a consultation phone call at this time.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: John Tommy Rosas

Phone # (310) 570-6567

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

Called John Tommy Rosas but did not reach him. Left a voice mail for Mr. Rosas informing him of the project and letting him know that he can contact Marc Behrec if he has any questions.



Contact Report Form

AECOM Contact: Allison Hill

Date: October 9, 2015

Project # 60440382

Individual Contacted: Sandonne Goad

Phone # (951) 807-0479

Contact Information

Subject of Contact: Follow Up Consultation for Rancho Cienega Sports Complex Project

Items Discussed

When I spoke with Ms. Goad on the phone she informed me that she would like to direct us to contact Mr. Sam Dunlap to consult with on this project. Ms. Goad also stated that if we are unable to get in contact with Mr. Dunlap that we should contact her again and that she would make sure that he responds to our consultation request.

APPENDIX C

RESULTS OF PALEONTOLOGICAL RECORDS SEARCH

Natural History Museum of Los Angeles County 900 Exposition Boulevard Los Angeles, CA 90007

tel 213.763.DINO www.nhm.org

Vertebrate Paleontology Section Telephone: (213) 763-3325 Fax: (213) 746-7431 e-mail: smcleod@nhm.org

30 September 2015

AECOM 515 South Flower Street, 8th Floor Los Angeles, CA 90071

Attn: Marc A. Beherec, Ph.D., Archaeologist

re: Paleontological resources for the proposed Los Angeles Bureau of Engineering (LABOE) Rancho Cienega Sports Complex Project, AECOM Project # 60440382, in the City of Los Angeles, Los Angeles County, project area

Dear Marc:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed Los Angeles Bureau of Engineering (LABOE) Rancho Cienega Sports Complex Project, AECOM Project # 60440382, in the City of Los Angeles, Los Angeles County, project area as outlined on the portion of the Hollywood USGS topographic quadrangle map that you sent to me via e-mail on 29 September 2015. We have no fossil vertebrate localities that lie directly within the proposed project area, but we do have localities nearby in the same sedimentary deposits as those that occur within the proposed project area.

Surficial deposits in about the southwestern one-third of the proposed project area consist of younger Quaternary deposits of clay and sand, derived from a preexisting marshland. Surficial deposits in the remainder of the proposed project area consist of younger Quaternary Alluvium, derived broadly as fluvial deposits from the Los Angeles River to the east that would flow towards what is now Ballona Creek that flows just to the west. These younger Quaternary deposits typically do not contain significant vertebrate fossil remains in the uppermost layers, but they are underlain by older Quaternary sediments at relatively shallow depth that do contain significant vertebrate fossils. We have a cluster of localities near the proposed project area from these older Quaternary sediments that were found during the excavations for outfall sewers in the 1920's. Our closest fossil vertebrate



locality from these deposits is LACM 3369, located directly west of the southern boundary of the proposed project area at Sycamore Avenue and Rodeo Road that produced a specimen of fossil horse, Equus, at a depth of only six feet below the surface. Just west of LACM 3369 we have localities LACM 3367 and 3370 also along Rodeo Road. These localities produced fossil mastodon, Mammut, at unknown depth, and a fossil sabertooth cat, Smilodon, at unknown depth. Just northwest of the proposed project area, along the Southern Pacific Railway, our locality LACM 3366 produced a specimen of fossil camel, *Camelops*, at unknown depth. Further to the west we have locality LACM 4232, near Moynier Lane and Higuera Street, where specimens of fossil mammoth, Mammuthus, and fossil human, Homo sapiens, were found in the sand and clay silts. Just west and north of locality LACM 4232, in sediments around Ballona Creek, we have locality LACM 3368, along Sentous Avenue on the east side of Ballona Creek, that produced a specimen of fossil horse, Equus, at unknown depth, and locality LACM 4250, southeast of the intersection of Jacob Street and Sentney Avenue on the west side of Ballona Creek, where remains of fossil mammoth, Mammuthus, were collected at unknown depth. To the east of the southern boundary of the proposed project area we have locality LACM 1159, near the intersection of Rodeo Road and Buckingham Road, that contained remains of fossil human, Homo sapiens, at a depth of 19-23 feet below the surface.

Surface grading or very shallow excavations in the younger Quaternary Alluvium of the proposed project area are unlikely to encounter significant fossil vertebrate remains. Deeper excavations that may extend down into older Quaternary deposits, however, may well uncover significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Sediment samples should also be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

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

Sincerely,

Summel A. Mi Leod

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

enclosure: invoice

APPENDIX D

DPR FORMS

Primary # __ HRI #

Trinomial

*Resource Name or #: Celes King III Indoor Pool

P1. Other Identifier: Rancho Cienega Pool, Rancho Cienega Park Pool *P2. Location:
Not for Publication
Unrestricted *a. County: Los Angeles and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Hollywood Date: 1966 T 1S; R 13W NW ¼ of Sec 7; B.M. S.B.B.M.

c. Address: 50001 Rodeo Rd

Page 1 of 2

d. UTM: Zone: 11S; 375198 mE/ 3765466 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

Located on a parcel approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (I-405; San Diego Freeway). The pool is located in the southeast corner of the 30-acre regional park which is bounded by the Metro Expo Line and Exposition Boulevard to the north, Dorsey High School to the west, Rodeo Road and residential housing to the south, and a shopping center to the east.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The Celes King III indoor pool was constructed in June 1963. The building is five bays wide and has an asymmetrical, side-gabled roofline with a steep front and a low pitch towards the rear of the building. The building reflects modern style with the abstract acute angles in the criss-cross form of glass panels that compose the sloped south side. The south side consists of intersecting, angled concrete forms inset with multi-light glass panels. The east side of the building also has a low band of triangular glass panels with a solid stucco/concrete wall above. A one-and-a-half-story concrete block addition is located to the rear of the east side, and contains a single door and no other apparent fenestration. The west side also has a low, narrow band of triangular glass panels, and otherwise consists of a stucco/concrete wall with two one-story concrete block additions with access doors. The rear of the building consists of a concrete block wall that contains the main entrance to the building. The entrance is a projecting, covered, glazed enclosure, with two symmetrical sets of double doors with transoms above and glass panels flanking the doors. The interior of the building contains a pool with five swimming lanes and five associated diving boards at one end.

*P3b. Resource Attributes: (List attributes and codes) HP39

*P4. Resources Present: ⊠Buildina □Structure □Object □Site □District □Element of District □Other (Isolates, etc.)

*P11. Report Citation: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

*Attachments: DNONE DLocation Map DSketch Map DContinuation Sheet ØBuilding, Structure, and Object Record DArchaeological Record District Record Linear Feature Record DMilling Station Record DRock Art Record □Artifact Record □Photograph Record □ Other (List):



*P6. Date Constructed/Age and Sources: Historic □Prehistoric □Both Constructed1960-1963. Source: Building permits; Los Angeles Times, various articles.

Celes King III Indoor Pool, view facing northwest. 10/01/2015

P5b. Description of Photo:

*P7. Owner and Address: City of Los Angeles

*P8. Recorded by: AECOM 515 South Flower Street, 8th Floor

Los Angeles, California 90071

*P9. Date Recorded: 10/01/2015

*P10. Survey Type: Intensive survey

City: Los Angeles

Zip: 90016

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

BUILDING, STRUCTURE, AND OBJECT RECORD

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B1. Historic Name: Rancho Cienega Pool

- B2. Common Name: Rancho Cienega Pool
- B3. Original Use: Swimming Pool
- *B5. Architectural Style: Modern
- *B6. Construction History: (Construction date, alterations, and date of alterations)

The pool was constructed between 1960 and 1963. Major repairs to the pool took place between 1990 and 1993. No major alterations to the exterior of the building.

*B7. Moved? ⊠No □Yes □Unknown Date:

*B8. Related Features: The pool is located within the Rancho Cienega Sports Complex that contains several athletic and recreational facilities.

B9a. Architect: Albert Criz

*B10. Significance: Modern Civic Architecture Theme: Recreation Period of Significance: 1963 Property Type: Swimming pool

Applicable Criteria: NRHP C/CRHR 3 (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) The Celes King III Indoor Pool is associated with the expansion of civic recreational facilities in Los Angeles in the 1960s. Built in 1963, the pool represented the fruition of the plan for a public pool at the park proposed in 1936. Original plans for a pool and bathhouse were put on hold until the development of the community created a demand for the facility. In 1957, the funding for the pool was granted. In the 1960s, it was the only indoor pool operating throughout the year, but it was not Los Angeles' first indoor pool. By 1925, Los Angeles had 15 indoor and three outdoor pools in operation (Wiltse 2007). The Celes King III Indoor Pool is not representative of the historical theme of indoor public pools in Los Angeles as a particularly significant example; therefore, it is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. In 1998, the City Council voted to rename the pool in honor of Celes King III, past president of the Los Angeles City Human Relations Commission and the Los Angeles NAACP, and former state chairman of the Congress of Racial Equality (Los Angeles Sentinel 1998; LAT 1998). However, there is no direct association between King and the pool building. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Designed circa 1960, the pool building reflects the modern architectural movement in Los Angeles in the mid-20th century, when innovative designs and materials were expressive in dramatic new ways using abstract images, acute angles, and pillars rendered in concrete (National Trust for Historic Preservation 2010). Modern architecture in Los Angeles "manipulated light and space to create soaring interior spaces and striking exterior silhouettes," and "even modest structures sought to incorporate stylistic flair" (National Trust for Historic Preservation 2010). The pool building is representative of the modernity of Los Angeles' mid-20th century architectural movement. Designed by Albert Criz, the striking diamond-shaped window panels of the south facade are representative of his body of work throughout Los Angeles, most clearly represented in the West Los Angeles Civic Center that Criz designed circa 1960. Criz is not an established master architect in general architectural context for Los Angeles, but is noted for several modern civic works that may be determined significant as they achieve 50 years in age. The Celes King III Indoor Pool is a good example of Criz's design work. The building is architecturally significant and meets NRHP Criterion C and CRHR Criterion 3 at the local level for its contribution of modern architectural design in Los Angeles. The Celes King III Indoor Pool does not, nor is likely to vield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR. The building retains its feeling, association, workmanship, location, design, setting and materials, as a modern-designed indoor pool located within a recreational complex in Los Angeles. The pool is eligible listing in the NRHP and the CRHR.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

For a full list of references, see:

AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California. B13. Remarks:

*B14. Evaluator: M.K. Meiser, M.A., AECOM *Date of Evaluation: 10/20/2015

(This space reserved for official comments.)



*NRHP Status Code 3S *Resource Name or # Celes King III Indoor Pool

B4. Present Use: Swimming Pool

Original Location:

b. Builder: Unknown

Area: Los Angeles

Primarv # HRI#
State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD** Primary # _ HRI # ____

Trinomial

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*Resource Name or #: Rancho Cienega Sports Complex

 P1. Other Identifier: Rancho Cienega Sports Center, Rancho Cienega Park

 *P2. Location: □ Not for Publication ☑ Unrestricted *a. County: Los Angeles

 and (P2b and P2c or P2d. Attach a Location Map as necessary.)

 *b. USGS 7.5' Quad: Hollywood Date: 1966 T 1S; R 13W NW ¼ of Sec 7; B.M. S.B.B.M.

 c. Address: 50001 Rodeo Rd
 City: Los Angeles

 d. UTM: Zono: 11S: 2765108 mE(2765466 mN) (C P S)

d. UTM: Zone: 11S; 375198 mE/ 3765466 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

Located on a parcel approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (I-405; San Diego Freeway). The 30-acre regional park is bounded by the Metro Expo Line and Exposition Boulevard to the north, Dorsey High School to the west, Rodeo Road and residential housing to the south, and a shopping center to the east.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The Rancho Cienega Sports Center is located at 5001 Rodeo Road and consists of an approximately 30-acre recreational park that primarily contains various athletic fields and sports facilities. Beginning in 1937, the complex was built in several phases. It currently contains (clockwise from the southwest corner) a football and track stadium (Jackie Robinson Stadium) in the southwestern corner surrounded by grandstands and an associated restroom facility; a team facility and a large paved parking lot in the northwest corner; baseball and softball (or Little League) fields in a central area; a soccer field in the northeast corner; two basketball and two volleyball courts on a rectangular hard surface; 12 asphalt tennis courts in the southeastern corner; the Celes King III indoor swimming pool and a day care center in the southeast central area; and a restroom facility, a gymnasium, and an additional parking lot in the southwest central area. The majority of the athletic fields and sports facilities are in their original locations from when they were first constructed. Alterations to the site have included the improvements to the stadium; the resurfacing and/or conversion of the playing fields for different sports; the resurfacing and additional of parking facilities; the addition of the indoor pool, bathhouse, and restroom facility circa 1963; the removal of the original field house and the construction of a new gymnasium in 1980; and the addition of the day care center circa 2002.

*P3b. Resource Attributes: (List attributes and codes) HP35

*P4. Resources Present: ØBuilding ØStructure Object OSite District Delement of District Other (Isolates, etc.)



***P11. Report Citation:** AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

*Attachments: DNONE Decation Map Decenter Map Continuation Sheet Building, Structure, and Object Record Art Record District Record Decenter Linear Feature Record Decenter Milling Station Record Record Record Art Record Art Record Decenter (List):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

BUILDING, STRUCTURE, AND OBJECT RECORD

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*NRHP Status Code 6Z

Primary #

B4. Present Use: Recreation

Original Location:

Theme: Recreation

HRI#

*Resource Name or # Rancho Cienega Sports Complex

Area: Los Angeles

- B1. Historic Name: Rancho Cienega Playground
- B2. Common Name: Rancho Cienega Sports Center, Rancho Cienega Park
- B3. Original Use: Recreation
- *B5. Architectural Style: N/A
- *B6. Construction History: (Construction date, alterations, and date of alterations)

Construction of the Rancho Cienega Sports Center began in 1936–1937 and was a joint project between the City and the WPA. The facilities have been updated and altered over the years to maintain the park's functionality, including the addition of a new pool and other buildings from 1960-1964 and resurfacing and alteration of the athletic fields and parking lots over time.

*B7. Moved? ⊠No □Yes □Unknown Date:

*B8. Related Features: The recreational park includes a football and track stadium with grandstands, baseball and softball diamonds, tennis, volleyball and basketball courts, parking lots, a day care center, gymnasium, pool, and maintenance and restroom facilities.

B9a. Architect: Department of Playgrounds and Recreation

***B10. Significance:** Community development

Period of Significance: 1936-37

Property Type: Park Applicable Criteria: N/A (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) Construction of the Rancho Cienega Sports Center began in 1936–1937 and was a joint project between the City and the WPA. It is associated with civic works projects of the WPA during the Great Depression and the expansion of the City's recreational facilities in the growing Los Angeles suburbs. Although the WPA funded approximately 50% of the project and provided the labor to grade and construct the facilities, the association of the facility and the WPA is not particularly representative of the significant work that the WPA did throughout Los Angeles and the nation as part of the New Deal. The complex was the largest playground in Southern California at the time it was planned and constructed, and "one of the most important major units in the Playground and Recreation Department's system of playgrounds" (LAT 1937a). However, the overall expansion of all of the recreational facilities under the City's Department of Playground and Recreation was representative of the civic projects to improve public facilities during a period of growth and suburban expansion. The Rancho Cienega Sports Center as a complex does not reflect any specific historical themes and is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. The land on which the Rancho Cienega Sports Center is located was donated by Anita M. Baldwin, an heiress and philanthropist, whose money and land came from the estate of her father, Lucky Baldwin, While Anita M. Baldwin is an important historical figure, the direct association between her land donation and the creation of the Rancho Cienega Sports Center is tenuous, as she is more closely associated with projects in Arcadia, California, and donated large tracts of the Baldwin estate to various charities and municipalities. There are no other known associations between the complex and other important historic persons. The complex is not eligible under NRHP Criterion B or CRHR Criterion 2. The athletic facilities at the Rancho Cienega Sports Center, including a football and track stadium with grandstands, baseball and softball diamonds, tennis, volleyball and basketball courts, and restroom facilities, employ typical materials, forms, and design, with the exception of the Celes King III Indoor Pool, which was an addition to the park in 1963. The facilities have been updated and altered over the years to maintain the park's functionality. The complex as a whole does not demonstrate any particular architectural significance and does not meet NRHP Criterion C or CRHR Criterion 3. This

complex does not, nor is likely, to yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

For a full list of references, see: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

B13. Remarks:

*B14. Evaluator: M.K. Meiser, M.A., AECOM *Date of Evaluation: 10/20/2015

(This space reserved for official comments.)



b. Builder: WPA

 State of California — The Resources Agency
 Primary # ______

 DEPARTMENT OF PARKS AND RECREATION
 HRI # ______

 PRIMARY RECORD
 Trinomial ______

Page 1 of 2

*Resource Name or #: Rancho Cienega Sports Complex Restroom Facility

*a. County: Los Angeles

City: Los Angeles

P1. Other Identifier:

- *P2. Location: □ Not for Publication ☑ Unrestricted and (P2b and P2c or P2d. Attach a Location Map as necessary.)
 - ***b. USGS 7.5' Quad:** Hollywood **Date:** 1966 **T** 1S; **R** 13W **NW** ¹/₄ of Sec 7; **B.M.** S.B.B.M.
 - c. Address: 50001 Rodeo Rd
 - d. UTM: Zone: 11S; 375198 mE/ 3765466 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

Located on a parcel approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (I-405; San Diego Freeway). The building is located in the south central area of the 30-acre regional park which is bounded by the Metro Expo Line and Exposition Boulevard to the north, Dorsey High School to the west, Rodeo Road and residential housing to the south, and a shopping center to the east.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The restroom facility is a one-story building with two segregated men's and women's restrooms divided by an outdoor breezeway. The building has an L-shaped plan and is oriented at an angle from the road. It has concrete block walls, a very low-pitched roof with exposed rafters, overhanging eaves, and asphalt roofing. Within the ell of the building on the south side, there is a partial-width porch covering supports by simple 4-inch by 4-inch posts. On the south side, a pair of utility doors accesses the east side of the building. Adjacent to the doors, the building projects under the porch. In this section, multi-paned windows at the corners are obscured by security screens. Access to the restrooms is provided through doors within the breezeway. The north side of the building has a series of clerestory windows near the roofline and within the gable of the cross-gable forming the ell.

*P3b. Resource Attributes: (List attributes and codes) HP39

*P4. Resources Present: ØBuilding OStructure Object OSite District DElement of District Other (Isolates, etc.)



P5b. Description of Photo: Restroom facility, view facing south. 10/01/2015

Zip: 90016

*P6. Date Constructed/Age and Sources: I Historic I Prehistoric I Both Constructed circa 1964. Source: historicaerial.com, 1964 aerial photograph.

***P7. Owner and Address:** City of Los Angeles

***P8. Recorded by:** AECOM 515 South Flower Street, 8th Floor Los Angeles, California 90071

*P9. Date Recorded: 10/01/2015

*P10. Survey Type: Intensive survey

***P11. Report Citation:** AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

*Attachments: □NONE □Location Map □Sketch Map □Continuation Sheet ☑Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

Page 2 of 2

B1. Historic Name:

- B2. Common Name:
- B3. Original Use: Restroom facility
- *B5. Architectural Style: Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Constructed circa 1964. No major alterations to the exterior of the building.

*B7. Moved? ⊠No □Yes □Unknown Date:

*B8. Related Features: The restroom facility is located within the Rancho Cienega Sports Complex that contains several athletic and recreational facilities.

B9a. Architect: Unknown

*B10. Significance: Community development Theme: Recreation Period of Significance: 1964 Property Type: Restroom facility

Applicable Criteria: N/A (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) Built circa 1964, the restroom facility located at the Rancho Cienega Sports Center is associated with the development of recreational facilities in the mid-20th century in Los Angeles. This building was a later addition to the complex that was started in 1936. It relates to the renovation of the property for continued use of the recreational parks and does not reflect any specific historical themes. It is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the mid-20th century, this building is not architecturally significant and does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

For a full list of references, see: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

B13. Remarks:

*B14. Evaluator: M.K. Meiser, M.A., AECOM *Date of Evaluation: 10/20/2015

(This space reserved for official comments.)



Original Location:

Area: Los Angeles

b. Builder: Unknown

*Required information

*NRHP Status Code 6Z

*Resource Name or # Rancho Cienega Sports Complex Restroom Facility

B4. Present Use: Restroom facility

Primary # HRI#

Primary # __ HRI #

Trinomial

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*Resource Name or #: Team Building

City: Los Angeles

P1. Other Identifier: Rancho Cienega Maintenance Building; WPA Building *a. County: Los Angeles

*P2. Location:
Not for Publication
Unrestricted

and (P2b and P2c or P2d. Attach a Location Map as necessary.) *b. USGS 7.5' Quad: Hollywood Date: 1966 T 1S; R 13W NW ¼ of Sec 7; B.M. S.B.B.M.

- c. Address: 50001 Rodeo Rd
- d. UTM: Zone: 11S; 375198 mE/ 3765466 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

Located on a parcel approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (I-405; San Diego Freeway). The building is located north of Jackie Robinson Stadium in the 30-acre regional Rancho Cienega park which is bounded by the Metro Expo Line and Exposition Boulevard to the north, Dorsey High School to the west, Rodeo Road and residential housing to the south, and a shopping center to the east.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Located just north of Jackie Robinson Stadium, this building is a modest one-story building with a rectangular plan, stucco walls, and slats in the low-pitched gable below a Spanish tile roof. The south side of the building contains three single doors above a concrete porch and two filled-in window openings. The west side contains a central single door with a concrete porch, a window opening containing a pair of three-light casement windows (currently boarded), and a smaller window opening that appears filled in. The east side contains a single door over a concrete porch and no other fenestration. The north side contains a series of five rectangular window openings, three of which are boarded or filled, and the other two that are obscured with security screens. A plaque on the south wall of the building indicates that it was built by the WPA in 1937.

*P3b. Resource Attributes: (List attributes and codes) HP35

*P4. Resources Present: ⊠Building □Structure □Object □Site □District □Element of District □Other (Isolates, etc.)



P5b. Description of Photo: Team Building, view facing northeast. 10/01/2015

Zip: 90016

*P6. Date Constructed/Age and Sources: Historic □ Prehistoric □Both Constructed 1937. Source: Building sign; Los Angeles Times, various articles.

*P7. Owner and Address: City of Los Angeles

*P8. Recorded by: AECOM 515 South Flower Street, 8th Floor Los Angeles, California 90071

*P9. Date Recorded: 10/01/2015

*P10. Survey Type: Intensive survey

*P11. Report Citation: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

*Attachments: DNONE DLocation Map DSketch Map DContinuation Sheet ØBuilding, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION HRI# BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

B1. Historic Name: Team Building

- B2. Common Name: Maintenance Building
- B3. Original Use: Restroom/team changing room facility B4. Present Use: Maintenance facility
- *B5. Architectural Style: Spanish Eclectic

*B6. Construction History: (Construction date, alterations, and date of alterations) Constructed in 1937. Window openings filled or boarded at unknown date.

*B7. Moved? ⊠No □Yes □Unknown Date:

*B8. Related Features: The building is located adjacent to the Jackie Robinson Staidum within the Rancho Cienega Sports Complex that contains several athletic and recreational facilities.

B9a. Architect: Unknown

*B10. Significance: Community development Theme: Recreation Period of Significance: 1937 **Property Type:** Recreation facility

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) Built in 1937 by the WPA, the team building was part of the Rancho Cienega Sports Center, a new recreational park under the City's Department of Playground and Recreation through the joint project with the WPA. The building is associated with civic works projects of the WPA during the Great Depression and the expansion of the City's recreational facilities in the growing Los Angeles suburbs. Although built by the WPA, the association of this modest building and the WPA is not particularly representative of the significant work that the WPA performed under the New Deal. The building was built as a small support structure to the athletic fields, providing a restroom and a place for teams to change. It is not particularly representative of any specific historical themes and is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the 1930s, this building does not represent a specific style, although it has some Spanish Eclectic features such as stucco siding and a Spanish tile roof, and it is not architecturally significant. Built by the WPA, it is a very modest example of the WPA's body of architectural work. It does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

For a full list of references, see:

AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

B13. Remarks:

*B14. Evaluator: M.K. Meiser, M.A., AECOM *Date of Evaluation: 10/20/2015

(This space reserved for official comments.)



*Required information

*NRHP Status Code 6Z

*Resource Name or # Team Building

Primary #

b. Builder: WPA

Applicable Criteria: N/A

Original Location:

Area: Los Angeles

State of California — The Resources Agency Primary # __ **DEPARTMENT OF PARKS AND RECREATION** HRI # PRIMARY RECORD Trinomial

Page 1 of 2

*Resource Name or #: Rancho Cienega Sports Complex Tennis Shop

*a. County: Los Angeles

City: Los Angeles

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted and (P2b and P2c or P2d. Attach a Location Map as necessary.)

- *b. USGS 7.5' Quad: Hollywood Date: 1966 T 1S; R 13W NW ¼ of Sec 7; B.M. S.B.B.M.
- c. Address: 50001 Rodeo Rd d. UTM: Zone: 11S; 375198 mE/ 3765466 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

Located on a parcel approximately 6.5 miles southwest of downtown Los Angeles in the West Adams-Baldwin Hills-Leimert Community and Council District 10, approximately 0.8 mile south of Interstate 10 (I-10; Santa Monica Freeway) and approximately 3.5 miles northeast of Interstate 405 (I-405; San Diego Freeway). The building is located adjacent to the tennis courts in the southeast area of the 30-acre regional park which is bounded by the Metro Expo Line and Exposition Boulevard to the north, Dorsey High School to the west, Rodeo Road and residential housing to the south, and a shopping center to the east.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The tennis shop is a one-story building with rectangular plan. It has concrete block walls, a very low-pitched hipped roof with exposed rafters, overhanging eaves, and asphalt roofing. The building faces east towards the tennis courts, is three bays wide, and has a full-length covered porch supported by four concrete block columns. In the southern bay, there is a roll-up utility door. The central bay is filled and is covered with stucco siding. The northern bay contains a steel and glazed storefront with fixed window panels and a single access door with transoms above. The north, south, and west walls of the building are concrete block with no fenestration. On the west wall, a trellis system has been installed to encourage ivy/vine growth.

*P3b. Resource Attributes: (List attributes and codes) HP39

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:

Tennis, view facing northwest. 10/20/2015

Zip: 90016

*P6. Date Constructed/Age and Sources: ØHistoric □ Prehistoric □Both Constructed circa 1964. Source: historicaerial.com, 1964 aerial photograph.

*P7. Owner and Address: City of Los Angeles

*P8. Recorded by: AECOM 515 South Flower Street, 8th Floor Los Angeles, California 90071

*P9. Date Recorded: 10/01/2015

Type: Intensive *P10. Survey survey

*P11. Report Citation: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

*Attachments: DNONE DLocation Map DSketch Map DContinuation Sheet ØBuilding, Structure, and Object Record DArchaeological Record District Record Linear Feature Record DMilling Station Record DRock Art Record □Artifact Record □Photograph Record □ Other (List):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

B1. Historic Name:

- B2. Common Name:
- B3. Original Use: Recreational facility
- *B5. Architectural Style: Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Constructed circa 1964. No major alterations to the exterior of the building.

*B7. Moved? ⊠No □Yes □Unknown Date:

*B8. Related Features: The tennis shop is located adjacent to the tennis courts at the Rancho Cienega Sports Complex, which contains several athletic and recreational facilities.

B9a. Architect: Unknown

*B10. Significance: Community development Theme: Recreation Period of Significance: 1964 **Property Type:** Recreational facility

Applicable Criteria: N/A (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) Built circa 1964, the tennis shop building is associated with the development of recreational facilities in the mid-20th century in Los Angeles. This building was a later addition to the complex that was started in 1936. It relates to the renovation of the property for continued use of the recreational parks and does not reflect any specific historical themes. It is not eligible for the NRHP under Criterion A or the CRHR under Criterion 1. Research has not revealed any direct associations between this facility and any historically important persons, and it is not eligible under NRHP Criterion B or CRHR Criterion 2. Constructed with typical methods and materials dating from the mid-20th century, this building is not architecturally significant and does not meet NRHP Criterion C or CRHR Criterion 3. Finally, this resource does not, nor is likely to, yield important additional information about history or prehistory; therefore, it does not meet NRHP Criterion D or CRHR Criterion 4. It is not eligible for the NRHP or CRHR.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

For a full list of references, see: AECOM, 2015. Cultural Resources Assessment for Rancho Cienega Sports Complex (Celes King III Pool) Project, Los Angeles, California.

B13. Remarks:

*B14. Evaluator: M.K. Meiser, M.A., AECOM *Date of Evaluation: 10/20/2015

(This space reserved for official comments.)



b. Builder: Unknown

Area: Los Angeles

B4. Present Use: Recreational facility

*NRHP Status Code 6Z

*Resource Name or # Rancho Cienega Sports Complex Tennis Shop

Primary # HRI#

Original Location:

APPENDIX D Geotechnical Data Report

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

GEOTECHNICAL ENGINEERING GROUP



GEOTECHNICAL ENGINEERING REPORT RANCHO CIENEGA SPORTS COMPLEX TRACT: RANCHO CIENEGA O'PASO DE LA TIJERA, BLOCK: NONE LOT: PT TOMAS A SANCHEZ 3317.5 ACRES 5001 RODEO ROAD LOS ANGELES, CALIFORNIA

W.O. #E1907694 GEO FILE # 15-002 MAY 27, 2015

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1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed Rancho Cienega Sports Complex project. The project site, as shown in Figure 1 - Site Vicinity Map, is located on the north side of Rodeo Road near La Brea Avenue. The project address is 5001 Rodeo Road, Los Angeles. The purposes of this investigation were to evaluate the nature and engineering properties of the subsurface materials and develop geotechnical recommendations for design and construction of the project. The City of Los Angeles, Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group (GEO) has prepared this report in response to the Architectural Division's request dated January 6, 2015.

2.0 PROJECT DESCRIPTION

The project consists of constructing a new 30,000 square-foot sports complex that will include a new gym, pool, bathhouse, offices, a multipurpose community room and a fitness annex. Accessory spaces related to the main facility will include a new Tennis Court viewing structure, tennis pro shop / concession stand, VIP / Press box above the stadium and concession stand. The project will also include relocation of the existing Los Angeles Department of Recreation and Parks (RAP) maintenance yard. Other site improvements include construction of parking, a multipurpose field, park infrastructure, and landscaping.

Architectural Plans and Sections are provided in Appendix A of this report. As shown on the Proposed Site Plan (Sheet A-101), the sports complex will be located in the southern portion of the site. There is an existing indoor gymnasium, childcare center, and restrooms/maintenance facility located in the area of the proposed sports complex (see Sheet A-100). We understand the indoor gymnasium and restrooms/maintenance facility will be demolished; however, the childcare center will remain in-place.

The proposed sports complex plan is depicted on Sheet A-200. The proposed site elevations and architectural cross-sections are presented on Sheets A-301 and A-401, respectively. The complex, as shown on Sheet A-200, will consist of two main levels; a ground level and a mezzanine level. The cross-sections on Sheet A-401 indicate the mezzanine level will be about 15 feet above the ground level. The pool will extend to a maximum depth of about 12 feet below the ground level. Corrugated metal wall panels, as shown on Sheet A-301, will be constructed on the south and north sides of the sports complex. The panels extend from approximately 10 feet to 39 feet above the ground level above the ground level.

We understand the sports complex will consist of a pre-fabricated and metal frame structure. The column compression loads, including dead plus sustained live, will be up to approximately 75 kips (each) at some locations. The net tensile loads at each column location will on the order of 4 kips and the lateral load will be about 6 kips. In some areas of the complex, there will be a continuous wall load of about 8 kips/foot.

The wall panel columns are expected to have compression and tensile loads of about 15 kips for both. The lateral load for these structures is about 20 kips, and the moment at the foundation base is about 240 kips-foot.

We expect the proposed site elevations will be within 1 foot of the existing ones, except for in the pool area. If significant changes to the project are proposed, the findings and recommendations in this report may not still be applicable, and a supplemental report may be required. GEO should be provided an opportunity to review any proposed changes and determine if a supplemental report is required.

3.0 GEOTECHNICAL INVESTIGATION

Willdan Geotechnical (Willdan) completed field exploration and laboratory testing programs for the project, and their data report is provided in Appendix B of this report. The locations of the borings and infiltration tests are presented on Figure 1 in their report (Appendix B). The information contained in Willdan's data report is summarized below:

- Description of the hollow-stem auger (HSA) drilling, mud rotary drilling, and soil sampling procedures;
- Description of the field screening procedures to detect potential contamination;
- Description of the infiltration testing methods;
- Description of laboratory testing methods;
- Boring logs;
- Infiltration test results;
- Laboratory test results;

Also, the City of Los Angeles, Department of General Services, Standards Division (Standards) drilled three borings; each to a depth of of 25 feet below ground surface (bgs), to determine the stabilized groundwater depths. Standards' data report is included in Appendix C of this report.

The findings and recommendations presented in this report are based on the field exploration and laboratory testing programs completed by Willdan (Appendix B) and the exploratory drilling completed by Standards (Appendix C). GEO has reviewed both data reports, concurs with the findings, and accepts responsibility for the use of their contents.

4.0 DISCUSSION OF FINDINGS

The following discussion of findings is based on our observations and the results of the field exploration and laboratory testing programs (Appendices B and C).

4.1 GEOLOGIC SETTING

The Geologic Map by Thomas W. Dibblee Jr. (1989), as shown on Figure 2, indicates the site is underlain by surficial sediments from the Holocene Epoch. The northeast portion is mapped as alluvium (Qa), which according to Dibblee Jr., consists of clay, sand, and gravel. The southwest portion is mapped as clay and sand of pre-development marshlands (Qc).

4.2 SITE CONDITIONS

As shown on Sheet A-100 in Appendix A, the project site consists of an existing park with several maintenance and recreational buildings. The site topography generally descends very gently towards the west. The site elevations are between 103 and 104 feet above mean sea level (msl) in the east portion of the park, and between 99 and 101 feet msl in the west portion. The site is accessed off Rodeo Road on the south side and Exposition Boulevard on the north side. There are two main parking areas; one in the northwest area of the park and the other in the southern area adjacent to Rodeo Road.

The primary maintenance and recreational buildings are located in the southern portion of the site, adjacent to the southern parking lot (see Sheet A-100 in Appendix A). There are several other relatively small single-story accessory structures in other areas of the site. The existing concrete building on the east side of the southern parking lot contains an indoor swimming pool. The southwest portion of the park consists of a football field with a surrounding track. There are existing bleachers on both the east and west sides of the football field. The southeast portion of the park is occupied by existing tennis courts. Other existing park features include basketball courts, four baseball fields, a soccer field, and a paved skateboard area.

The surficial soil in the south portion of the site (i.e. proposed sports complex area) mostly consists of sandy silt to silty sand. Sandy lean clay was encountered in the upper 5 feet in HSA-3, and sandy lean clay to sandy silt was encountered in the upper 5 feet in HSA-7. The surficial soils extend to a depth of approximately 10 feet, and based on the field blow counts from B-1 and B-2, these soils are generally loose to medium dense or firm to stiff.

The surficial soil in the north portion of the site is similar to that in the south area (see HSA-10, -11, and -12). There is much more variation in the near surface soils in HSA-12 compared to HSA-10 and HSA-11.

4.3 SUBSURFACE CONDITIONS

The subsurface soils below 10 feet in the south portion (i.e. proposed sports complex area) of the site are generally soft and compressible to a depth of approximately 37½ feet bgs. The soft and compressible soils encountered in Borings B-1 and B-2, are comprised of fat clay, lean clay, and elastic silt. A layer of organic soil (i.e. peat) was encountered in both B-1 and B-2, and in HSA-5 between 35 and 37½ feet. A 2-foot thick layer of peat was also encountered in Boring HSA-2 at a depth of approximately 20 feet. The underlying soils mostly consist of dense to very dense granular alluvium to the maximum explored depth. The boring log information indicates there is some variability in the composition of the alluvium. B-1 encountered poorly graded sand underlain by silty sand. B-2 encountered poorly graded sand well graded gravel with silt and sand.

There appears to be a significant difference between the subsurface soils in the south portion of the site (i.e. sports complex area), and the north portion. The subsurface alluvial soils in the north and northwest portion of the site (see HSA-10 and HSA-11) mostly consist of lean clay / silt to the maximum explored depth of approximately 26½ feet. The subsurface soils in the northeast portion of the site (see HSA-12) mostly consist of interbedded silty sands and sandy silts to the maximum explored depth. The Modified California field blow counts indicate the consistency of the fine grained subsurface soils in the north portion is generally stiff to very stiff, and even hard (see HSA-10).

4.4 GROUNDWATER

Willdan encountered groundwater in five of their twelve HSA borings, HSA-1, -4, -5, -7, and -8 (Appendix B). The groundwater depth, as shown on Willdan's boring logs, ranges from approximately 5 to 37½ feet bgs. The remaining boring logs indicate groundwater was not encountered. The significant range in groundwater depth and/or lack of presence of groundwater in some of the borings is attributed to low permeability of the clayey soils. It is likely that groundwater did not have enough time to stabilize in the boreholes. It's also possible that the HSA drilling techniques may have resulted in smearing of the sides of the borehole, which in turn, further reduced the permeability of the clayey soils.

Standards drilled three borings (Appendix C), each to a depth of approximately 25 feet bgs, and left the boreholes open for several days. Following stabilization, the depth to groundwater ranged from approximately 6½ to 10 feet bgs in the three borings. The shallowest groundwater was encountered in HSA-2, which was drilled on the east side of the proposed complex and adjacent to the existing tennis courts.

Groundwater information from the California Department of Conservation, Division of Mines and Geology (DMG, 1998) indicates the shallowest reported historic groundwater depth at the project site is on the order of 10 feet bgs. Groundwater levels can fluctuate with seasonal rainfalls, dry weather (i.e. drought conditions), and pumping activities in the vicinity of the site.

4.5 SOIL ENGINEERING PROPERTIES

Moisture and dry density determinations were performed on samples to evaluate the in-situ unit weights of the different materials. Test results indicate the soft and compressible silts and clays have moisture contents and dry unit weights ranging from approximately 32 to 76 percent and 55 to 83 pounds per cubic foot (pcf), respectively. There is significant variation in the moisture content and dry density of the compressible clay and silt, and in our opinion, this is likely attributed to the composition of the soil itself as well the relatively high amount of organic material in the soil. Test results indicate the peat has a moisture content ranging from about 169 to 221 percent.

Atterberg Limits were performed on seven samples of the fine grained compressible soils to determine their plasticity index, and the results indicate the plasticity index (PI) ranges from 15 to 52. Based on the results, the fine grained soil tested can mostly be classified as fat clay, CH; although, some layers of silt and elastic silt exist.

Expansion index tests were performed on two samples of the near surface soil (upper 5 feet). The results indicate the expansion index is between 52 and 83, and based on these tests, the near surface soil has a medium expansion potential.

Compaction test results were performed on five bulk samples of the near surface soil (0 to 5 feet). The results indicate that the optimum moisture content and maximum dry density of these materials ranges from about 11.8 to 15.5 percent, and 111 to 118 pcf, respectively.

Consolidation tests were performed on seven samples of the native soil. The sample depths ranged from approximately 7½ and 35 feet bgs. Interpretation of the consolidation test results is summarized in Table B-1 of Willdan's report (Appendix B). Based on the test results, some of the samples may have been disturbed.

Unconsolidated undrained (UU) tests were performed on three undisturbed samples of the compressible soils between 12½ and 25 feet bgs. The UU test results indicate the undrained shear strength ranges from approximately 640 psf to 1,500 psf.

Direct shear tests were performed on two remolded samples and on two relatively undisturbed samples. Both the near surface soils from HSA-3 and HSA-4 were remolded to 90 percent relative compaction (RC) at close to the optimum moisture content. The relatively undisturbed samples were collected from depths of approximately 10 and 12.5 feet bgs. The direct shear test results indicate the remolded materials have an ultimate friction angle and cohesion value ranging from 28 to 30 degrees and 50 to 150 psf, respectively. The direct shear test results indicate the ultimate friction and cohesion value for both the undisturbed samples is 24 degrees and 300 psf, respectively.

5.0 SEISMIC CONSIDERATIONS

The following sections present seismic design parameters and discuss seismic hazards for the site.

5.1 2014 LABC SEISMIC DESIGN PARAMETERS

Seismic design parameters for the project were developed in accordance with the 2014 City of Los Angeles Building Code (2014 LABC). The parameters are based on mapped spectral acceleration values in the 2014 LABC, and the site conditions.

The seismic design parameters for the site are summarized in Table 1.

Parameter	Value	Reference
Site Class	D	ASCE 7-10 Table 20.3-1
Ss	1.997	ASCE 7-10 Figure 22-1
S ₁	0.723	ASCE 7-10 Figure 22-2
S _{MS}	1.997	ASCE 7-10 Equation 11.4-1
S _{M1}	1.085	ASCE 7-10 Equation 11.4-2
S _{DS}	1.331	ASCE 7-10 Equation 11.4-3
S _{D1}	0.723	ASCE 7-10 Equation 11.4-4
T _O (seconds)	0.109	ASCE 7-10 Chapter 11
T _S (seconds)	0.543	ASCE 7-10 Chapter 11

The peak ground acceleration (PGA_M) at the site is 0.73g.

5.2 SEISMIC HAZARDS

This section provides the results of our evaluation of earthquake-related geologic/geotechnical hazards for the site, including surface fault rupture and liquefaction.

5.2.1 Surface Fault Rupture

Earthquakes are generally caused by a sudden slip or displacement along a zone of weakness, known as a fault, in the Earth's crust. Surface fault rupture is the result of the fault displacement at the ground surface, and it is usually associated with moderate to large magnitude earthquakes ($M \ge 6$) that occur on active faults. The amount of displacement associated with surface fault rupture can be on the order of several feet or more, depending on the earthquake magnitude, ground motion amplification effects, and ground conditions. This displacement can cause significant damage to structures that are located along the trace of the rupture zone.

Based on information from the California Department of Transportation's (Caltrans') website, the Newport-Inglewood Fault is the closest fault, and located within approximately 1.3 miles (2.1 km) of the project site. Information from the California Geological Survey (2014), as presented on Figure 3 – Seismic Hazards Zone Map, indicates an active trace of the Newport-Inglewood Fault may be within approximately ½-mile from the southwest portion of the project site. The project site is not located within a State of California Alquist-Priolo Special Study Zone. Based on the above information, the potential for surface fault rupture to affect the project is considered remote.

5.2.2 Liquefaction Evaluation

As presented on Figure 3, the site is located within an area that is classified as potentially liquefiable. Our liquefaction evaluation included 1) determining if a particular soil is susceptible, and 2) if susceptible, analyzing that particular soil layer for liquefaction triggering during the design earthquake. Our liquefaction evaluation is discussed in more detail in the following paragraphs.

Significant research has recently been devoted to evaluating the liquefaction susceptibility of fine-grained soils. The susceptibility criteria adopted by the Los Angeles Department of Building and Safety (LADBS, 2014) is based on the findings of Bray and Sancio (2006). In order to assume a soil is not susceptible, the moisture content must not be greater than 80 percent of the liquid limit, or the soil must have a minimum Plasticity Index of 18. As discussed, a total of seven Atterberg Limits tests were performed on the fine grained soils to evaluate liquefaction susceptibility. Of these tests, only one of the fine grained soils tested had a plasticity index less than 18. The silt from B-1 between approximately 30 and 35 feet bgs has a PI equal to 15. According to LADBS' (2014) criteria, this material is susceptible to liquefaction.

The liquefaction triggering was evaluated using the SPT-based procedure by Youd et al. (2001) and the subsurface information from the mud rotary borings, B-1 and B-2 (Appendix A). We used 2/3 of the PGA_M, 0.49g, in the calculation of cyclic stress ratio (CSR). The earthquake magnitude along the Newport-Inglewood Fault was assumed to be $M_w = 6.7$ based on the deaggregation (USGS 2008). The drilling subcontractor's most recent SPT hammer energy measurements indicate the energy transfer is about 80 percent efficient. Although the historical high groundwater depth is on the order of 10 feet, we assumed the

groundwater depth to be 6½ feet bgs during the earthquake, which corresponds to the shallowest groundwater depth encountered during our field exploration. The existing groundwater depth, as discussed in Section 4.4, was assumed to be 9 feet in Boring B-1 and 6½ feet in B-2.

Results of the liquefaction triggering analyses are presented in Appendix D. The results of the analyses for B-1 indicate the factor of safety is less than 1.1 for the potentially liquefiable layers, and therefore, there is potential for post-liquefaction settlement. Potentially liquefiable layers exist in Boring B-1 between 6½ and 10 feet and between 30 and 35 feet. The results of the analyses for B-2 indicate the factor of safety is greater than 1.1 unless for the full PGA_M (0.73g) is used to calculate the CSR. In the case of the full PGA_M, a potentially liquefiable layer exists in B-2 between approximately $6\frac{1}{2}$ and 10 feet.

5.2.2.1 Bearing Capacity Failure

One of the effects of liquefaction in soils near the ground surface is the potential for a bearing capacity (i.e. punching) failure to occur. We evaluated the potential for a punching failure by estimating the post-liquefaction residual undrained shear strength, S_r. Seed and Harder (1990), as presented on Figure 4, developed an empirical procedure for estimating S_r based on corrected blow counts. The (N₁)_{60-cs} of the potentially liquefiable soil in B-1 at a depth of 7½ feet is approximately 18 (see Appendix D), which is well beyond the range of data points presented on Seed and Harder's (1990) chart. Based on our evaluation of the post-liquefaction residual undrained shear strength, the potential for a punching failure to occur is considered low.

5.2.2.2 Post-Liquefaction Settlement

Another potential consequence of liquefaction is seismically-induced settlement. Excess pore pressure generated by ground shaking and leading to liquefaction is associated with the tendency for loose, saturated soils to rearrange into a denser configuration during shaking. Dissipation of the excess pore pressure will produce volume decreases (termed consolidation or compaction) within the soil that may be manifested as ground settlement.

The total post-liquefaction settlement in B-1, which was estimated using the procedures by Tokimatsu and Seed (1987), is expected to be on the order of $1\frac{3}{4}$ -inches for both the partial and full PGA conditions. The differential settlement associated with liquefaction in B-1 is expected to be about 1-inch. In the case of the full PGA_M, the total post-liquefaction settlement in B-2 is expected to be on the order of $\frac{1}{2}$ -inch.

6.0 **RECOMMENDATIONS**

Based on the results of our investigation, the proposed project is considered geotechnically feasible provided the recommendations presented in this report are incorporated into the design and construction. If changes in the design are made, or variations or changed conditions are encountered during construction, GEO should be notified to determine if supplemental recommendations are required.

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6.1 KEY DESIGN ISSUES

As mentioned in Section 4.1, the southwest portion of the site is mapped as a marshland (Dibblee Jr., 1989). One of the key design issues is the potential for long-term static settlement associated with the compressible marshland deposits (i.e. clay and organic soil) underlying the site. The amount and timeline of the static settlement of organic soil is difficult to estimate due to the variability in thicknesses and decomposition rates.

Another key design issue is the potential for dynamic (i.e. post-liquefaction) settlement. The total post-liquefaction settlement is estimated to be about 1³/₄-inches, and the differential settlement could be on the order of 1-inch.

To mitigate the effects of static and dynamic settlement on structures, we recommend they be supported on deep foundations. Accessory structures that are relatively small and lightly loaded may be supported on a structural mat. Foundation recommendations are provided in this report.

We also recommend the site grades remain at or below the existing ones. Additional fill placement above the existing grades will result in settlement, which could adversely impact pavements, exterior flatwork, utilities, and existing structures that will remain in-place.

Another key design issue, which is also a construction concern, is the presence of relatively shallow perched groundwater. As mentioned, the groundwater depth was about 6½ feet in one of Standards' borings (see Appendix C). The pool design shall account for the effects of shallow groundwater as well as temporary shoring systems if used during pool construction.

6.2 EARTHWORK

All earthwork shall be performed in accordance with the geotechnical recommendations presented in this report and the LADBS Grading Division requirements. Furthermore, all earthwork should be performed under the observation and testing of GEO or their representative.

6.2.1 Site Preparation

Site preparation will initially involve the demolition and removal of the existing structures, including their foundations, concrete flatwork, asphalt. These materials should be removed from the construction area and hauled to a proper disposal area. If desired, existing pavement materials may be crushed to meet crushed miscellaneous base specifications. All depressions created as a result of the demolition and/or site preparation shall be properly backfilled with compacted fill.

Any utilities, whether active or inactive shall be identified and, if required, properly abandoned or relocated. Any depressions resulting from removal of any existing foundations or utility lines shall be properly backfilled and compacted in accordance with the recommendations of the following sections.

6.2.2 Over-Excavation

For pile-supported structures, over-excavation and recompaction is not required; however, the soil beneath pile caps shall be scarified 6 inches, moisture conditioned, and compacted to at least 90 percent relative compaction (RC).

Over-excavation is required beneath structural mat foundations, new pavements, site walls, and exterior concrete slabs. Following over-excavation in these areas, the exposed subgrade (i.e. excavation bottom) shall be scarified 6 inches, moisture conditioned and compacted to at least 90 percent RC.

The existing soil in the upper 3½ feet beneath structural mat foundations shall be removed. The excavation should extend 3 feet laterally beyond the edges of the footing or thickened edge. The excavation bottom shall be approved by a representative of GEO and the LADBS Grading Inspector prior to fill placement. The over-excavation and compacted fill placement shall result in a minimum of 3 feet of compacted fill beneath the thickened edge of the mat. The three foot zone of compacted fill includes the scarified and recompacted portion (approximately 6 inches) along the bottom of the excavation.

The soil beneath new pavements and site walls up to 8-feet high shall be excavated to a depth of 18 inches below existing grade or design subgrade elevation, whichever is deeper. The excavation shall extend laterally beyond the edges of the slab or footings a minimum distance of 2 feet. For new site walls, the over-excavation and recompaction shall result in at least 1 foot of compacted fill beneath the footings. For new pavements, the over-excavation and recompacted subgrade beneath the pavement section, which includes the aggregate base and asphalt.

The soil beneath new flatwork (i.e. exterior concrete slabs) should be over excavated to a depth of 12 inches below subgrade elevation. The excavation should extend laterally beyond the edges of the slab a minimum distance of 12 inches.

6.2.3 Temporary Excavations

Based on our observations during subsurface investigation and results of laboratory tests, the materials at the site should be readily excavated by conventional earthmoving equipment in good operating condition. All temporary excavations shall conform to the State of California Construction Safety Orders (CAL/OSHA).

Unsurcharged, temporary vertical excavations shall not exceed 4 feet. Unsurcharged excavations greater than 4 feet and to a maximum of 7 feet shall be sloped at a 1-1/2:1 (H:V) or flatter inclination from the ground surface to the bottom of the excavation. Temporary slopes for the pool, which are expected to extend to about 15 feet deep, shall be sloped back no steeper than 2:1 (H:V). If deeper excavations are proposed, they shall be reviewed by GEO and supplemental recommendations may be required.

6.2.4 Temporary Shoring

Cantilever or braced shoring may be considered at this site as an alternative to temporary excavations. Cantilever shoring shall only be utilized if some deflection is acceptable; therefore, it is not recommended adjacent to existing structures or utilities that cannot tolerate at least ½-inch of lateral and/or vertical movement.

Settlement of structures founded adjacent to the shoring will occur in proportion to both the distance between the shoring and the structure, and the amount of horizontal deflection of the shoring system. The vertical settlement will be a maximum at the shoring face and decrease as the horizontal distance from the shoring increases. Beyond a distance from the shoring equal to the height of the shoring, the settlement is expected to be negligible. The maximum vertical settlement is expected to be about 75 percent of the horizontal deflection of the shoring system.

Prior to excavation, it is recommended that walls, structures, or portions of structures within a horizontal distance of 1½ times the depth of the excavation be inspected to determine their present condition. For documentation purposes, photographs should be taken of preconstruction conditions and level surveys should be performed.

During construction, deflection of the shoring system shall be monitored initially on a frequent basis until it can be demonstrated that adjacent structures are not adversely impacted. At that time, less frequent monitoring can be performed. In addition, structures should be periodically monitored for signs of distress. In the event that distress of settlement is observed, GEO shall be contacted immediately to provide supplemental recommendations.

6.2.4.1 Lateral Earth Pressures

Cantilever or braced shoring shall be designed for the lateral earth pressures shown on Figure 5. These values are based on the assumption that (1) the shored soil material is level at ground surface, (2) the exposed height of the shoring is no greater than 15 feet for cantilevered shoring, and (3) the shoring is temporary, and will not be required to support the soil longer than about six months. Surcharge coefficients of 0.33 and 0.50 may be used with uniform vertical surcharges for cantilever and braced shoring lateral earth pressures, respectively. These surcharge pressures should be added to the lateral earth pressures.

6.2.4.2 Soldier Piles and Lagging Design

Drilled holes for soldier piles shall be backfilled with Controlled Low Strength Material (CLSM) per Greenbook Section 201, from the bottom of lagging (i.e. proposed excavation depth) to the ground surface. The CLSM shall contain a minimum of one sack of Portland cement per cubic yard of slurry and a maximum of two sacks of Portland cement per cubic yard of slurry. Drilled holes below the excavation bottom shall be backfilled with structural concrete. To reduce the potential for sloughing and caving of the soils, lagging shall be installed between the soldier piles. All lumber shall be pressure-treated in accordance with Specification C-2 of the American Wood Preservers Association.

6.2.4.3 Soldier Pile Construction Considerations

Based on the results of the investigation, there is the potential for soil caving to occur during pile excavation. It should be expected that groundwater will be encountered below a depth of about 6 feet bgs. Where caving soils are encountered, casing shall be used to support the sides of the excavations. If casing is installed, the inside diameter of casing shall be at least as large as the diameter of the pile shown on the shoring plans. Drilling shall be accomplished within the casing. WO #: E1907694

Even though the piles will be used for temporary shoring, it will be necessary for the contractor to remove loose soil from the bottom of the pile excavation. Upon completion of drilling, secure covers shall be placed over the excavations. Concrete placement shall be completed within 8 hours of drilling and drilled holes shall not be left open overnight. Drilled excavations shall be observed and approved by the Geotechnical Engineer prior to installation of steel reinforcement.

Concrete placement by the pumping and tremie method will be required. Both concrete mix and concrete placement should be addressed in the specifications. The steel reinforcement shall be installed and the concrete pumped immediately after drilling is completed. Drilled holes should not be left open overnight. Moreover, no drilled hole should be drilled immediately adjacent to another pile until the concrete in the other pile has attained its initial set. The tremie pipe should extend to the bottom of the pile excavation; it should be watertight and fitted with some form of valve at its lower end. During concrete placement, the bottom of the tremie pipe shall remain embedded at all times in at least 3 feet of concrete. Water shall be pumped out of the excavation concurrently with the concrete placement operations. If casing is used, it should be removed slowly; the casing should extend above ground surface and should always be filled with a sufficient head of concrete above the bottom of the casing before it is pulled out.

A significant amount of groundwater will likely be displaced during construction. Disposal of the water should be planned appropriately as the water may need to be contained before disposal. It may also be necessary to first obtain a permit from the Water Quality Control Board (RWQCB). The WQCB has the authority, from the United States Environmental Protection Agency (USEPA), to issue general National Pollutant Discharge Elimination System (NPDES) permits. As part of the permit application, testing of the water quality may be required. Appropriate handling and disposal of groundwater is the responsibility of the contractor.

6.2.5 Dewatering

It should be expected that groundwater will be encountered for excavations extending deeper than 6½ feet bgs. Dewatering will be required for construction of the pool, and it may be required to facilitate installation of utilities depending on their depths. The preparation of a conceptual dewatering plan for the pool shall be prepared by the contractor and reviewed by GEO.

6.2.6 Fill Materials and Placement

Fill materials may consist of the onsite sandy silt or silty sand soils or approved import soil. The onsite compressible silts and clays are not acceptable for reuse as fill material. Import soil shall be predominantly granular (minimum 80% passing number 4 sieve and 35% or less passing the number 200 sieve), non-expansive (EI less than 40), and shall be free of organic or inorganic debris, contamination and materials with any dimension larger than 3 inches. Proposed import soil shall be reviewed by GEO for approval prior to delivery to the job site. GEO shall be notified a minimum of three working days prior to scheduled importing of soil to the project site.

Fill material shall be placed in loose lifts not exceeding 8 inches in thickness, moistureconditioned to within 3 percent above the optimum moisture content and mechanically compacted. Clayey soils (soils with 15% or more finer than 0.005mm) placed beneath structural mat foundations shall be compacted to a minimum of 90 percent RC, as determined by ASTM Test Method D1557. Non clayey soils (less than 15% finer than 0.005mm) placed in building areas shall be compacted to a minimum of 95 percent RC.

All secondary fill placed in non-structural areas shall be moisture-conditioned to within 3 percent above the optimum moisture content and compacted to a minimum of 90 percent RC, as determined by ASTM Test Method D1557. Aggregate base shall be moisture conditioned to within 3 percent above optimum and compacted to a minimum of 95 percent RC.

Fill placement and compaction shall be observed and tested by a certified compaction testing agency working under the direct supervision of GEO. Compacted fill soils shall be kept moist, (at or slightly above the specified moisture content at the time of compaction) but not flooded, until covered with subsequent construction. If compacted fill soils become softened or disturbed, they shall be replaced or recompacted at the discretion of the Geotechnical Engineer before additional fill or construction is placed. Certification and inspection approvals for compromised soils are void and invalid.

6.2.7 Utility Trench Backfill

Trench excavations for utility pipes shall be backfilled under the observation of a representative of GEO. After utility pipes have been laid, properly bedded, and covered per the project specifications, they shall be backfilled to the ground surface or design subgrade with controlled backfill. Controlled backfill shall be moisture conditioned, placed and compacted in accordance with the recommendations presented above (Section 6.2.6). Densification by flooding or jetting is not allowed.

6.2.8 Fill Certification

Upon successful completion of fill placement and compaction, GEO will issue a Compaction Certification for the fill. Unless approved by the Building Inspector during construction, the Contractor shall not pour footings until an approval letter is issued by the Department of Building and Safety, Grading Division for the Compaction Certification. The contractor may excavate in compacted fill for foundation elements before the fill certification approval letter is issued, but does so at his/her own risk.

6.3 PILE FOUNDATIONS

The sports complex, mezzanine, pool, pool deck, and metal wall panels shall be supported on deep foundations. Given the potential for significant downdrag forces to develop, and thus, large cost(s) associated with deep piles, cast-in-drilled hole (CIDH) piles are not considered to be a cost-effective foundation system for this site. Driven piles are considered to be much more appropriate than CIDH piles. Based on our experience and judgment, low displacement steel piles are considered to be more suitable than large displacement ones. Large displacement piles may result in soil heave, which could adversely affect the existing childcare center and other existing improvements such as utilities.

6.3.1 Corrosion Potential

Willdan performed three corrosion tests on bulk samples from the upper 10 feet; however, corrosion tests were not performed on the soft compressible soils or the dense bearing granular soils. One of the key design issues related to the long term performance of steel piles is their susceptibility to corrosion. We recommend that a corrosion specialist be consulted regarding protection of the piles against corrosion.

6.3.2 Axial Load Capacity

The axial load capacity of single driven HP piles under both compression and uplift (i.e. tension) were estimated using the Brown Method (Brown et al., 2001). The Brown Method is a semi-empirical method that uses SPT N_{60} values for estimating unit shaft resistance and unit end bearing values. This method is based on capacity correlations with 71 static load tests from Caltrans projects in a wide variety of soil types. The pile types included HP piles among others. The method considers compression and uplift as well as pile installation method (impact driving and partial vibratory installation). For this project, we assume the piles will be installed using impact driving methods.

6.3.2.1 Compression

Pile tips shall be embedded a minimum of 5 feet into the dense to very dense granular soils, which results in a minimum pile length of about 42½ feet. The actual depths shall be determined by the structural engineer based on axial and lateral load requirements. Piles shall be spaced a minimum of 3 diameters apart on-center. No reduction in compression capacity is considered necessary for a group effect for pile spacing equal to or greater than 3 pile diameters. Piles within a group should be the same length and plan dimensions. Group action is not anticipated at this time.

Figure 6 provides preliminary axial compression capacity curves for HP 12x53, HP 14x89, and HP 14x117 piles, and Figure 7 provides preliminary axial compression capacity curves for PP 12.75x0.375, PP 14x0.50, and PP 16x0.625. The allowable capacities presented on Figures 6 and 7 are based on a factor of safety (FS) of 2.0 for skin friction and 2.0 for tip resistance. All frictional capacity from the soils in the upper 37½ feet was neglected. Also, we anticipate the upper 37½ feet of the pile will be coated with bitumen or another approved lubricant to significantly reduce the downdrag forces; therefore, downdrag forces were not considered in the capacities. Both the inside and outside of pipe piles shall be coated with bitumen or approved lubricant. Based on the information in the FHWA Manual for Driven Piles (USDOT, FHWA, 2006), we assumed the frictional capacity for the HP piles would act across the box perimeter and the end bearing capacity would act across the box perimeter and the end bearing capacity mould act across the box area. For the steel pipe piles, we assumed a plug would not develop as the penetration depth to pile diameter ratio is expected to be much less than 20. The compression capacities presented on Figures 6 and 7 may be increased by 1/3 to account for short-term temporary loads such as wind or seismic forces.

6.3.2.2 Uplift

Pile uplift (i.e. tension) capacities have been developed for the same piles discussed in the above section. Preliminary axial capacities of steel H-piles and open end steel pipe piles in tension are presented on Figures 8 and 9, respectively, in this report. The net allowable uplift resistance incorporates the side friction component of the pile capacity and the net

weight of the pile itself. The allowable frictional resistance is based on a FS of 2.0. Similar to the compression capacities, the soils in the upper 37½ feet were not considered in the contribution to tensile resistance.

6.3.3 Pile Driving and Load Tests

Variable pile driving conditions should be anticipated with lower driving resistances in the soft compressible soils and high driving resistances in the underlying dense granular soils. As mentioned, we anticipate the dense soils will be encountered at a depth of approximately 37½ feet bgs. Driving piles deeper than about 6 to 8 feet into these layers may be difficult or unattainable. Due to the anticipated loads, and particularly, the uplift capacities, we do not anticipate that pre-drilling will be required.

To better understand the driving characteristics and more accurately determine the pile lengths, a pile indicator program shall be conducted prior to manufacturing of production piles. At a minimum, indicator piles shall be driven near each of the four corners of the sports complex. Furthermore, a driveability analysis shall be performed prior to or as part of the indicator program. Due to variations in the subsurface conditions, it should be expected that the pile lengths may vary across the site.

We also anticipate at least two pile load tests will be performed for each type of pile; one in compression and another in tension. LADBS may require more pile load tests depending on the final number of piles. Per the 2014 LABC, pile load tests in compression shall be performed in accordance with ASTM D 1143. Pile load tests in tension shall be performed in accordance with ASTM D 3689.

6.3.4 Lateral Load Behavior

The lateral load behavior of the piles was evaluated using the program LPILE (Ensoft, 2013). LPILE uses load deflection (p-y) curves to approximate the relationship between soil resistance and pile deflection. For our analyses, we assumed a pile length of 45 feet. The lateral load behavior was evaluated for HP 12x53, HP 14x89, HP 14x117, PP 12.75x0.375, PP 14x0.50, and PP 16x0.625. The pile stiffness "EI" is based on the elastic modulus of steel (29,000 kips per square inch) and the area moment of inertia of the pile cross-section. The area moment of inertia for the HP 12x53, 14x89, and 14x117 piles was assumed to be 127, 261, and 443 in⁴, respectively, which are the weaker of the two axes. The area moment of inertia for the PP 12.75x0.375, PP 16x0.625 piles was assumed to be 279, 484, and 894 in⁴, respectively.

The main inputs in the LPILE software for each soil layer are the unit weight and shear strength. The unit weight and shear strength parameters of the soils in the upper 37½ feet are based on the results of the laboratory tests, as summarized in Section 4.5. The bearing soil below 37½ feet was assumed to have a total unit weight of 125 pcf, an effective friction angle of 38 degrees, and no cohesion.

Lateral load responses were evaluated for a ¼-inch and ½-inch deflection assuming both a free and fixed pile head. The LPILE results are presented in Appendix E. The structural engineer shall perform their own lateral load analyses, and confirm that the piles will not be overstressed (i.e. fail) in either shear or bending.

If pile caps are incorporated into the pile design, an allowable passive pressure of 240 psf per foot of depth against the sides of the pile caps may be used. The passive value may be increased one-third for short term seismic and wind loads. The passive pressure and frictional coefficient may be used in combination with pile bending without reduction to resist lateral loads.

6.3.5 Settlement

Total settlement of piles embedded into the dense granular soils is anticipated to less than ½-inch. This value of ½-inch, includes both static and dynamic settlement, and is based upon successful pile installation.

6.3.6 Vibration Monitoring

There is the potential for damage to occur to adjacent structures during pile driving. As mentioned, the existing childcare center is located in close proximity to areas where piles are anticipated. Vibration monitoring shall be performed during pile installation. In accordance with LADBS requirements, the peak particle velocity shall not exceed ½-inch per second.

6.4 STRUCTURAL MAT FOUNDATION

We recognize it may not be practical to pile-support all structures, especially those that are relatively small and lightly loaded. Accessory structures, which can accommodate settlement, may be supported on a structural mat bearing on compacted fill. The design team understands these structures may require jacking and/or leveling and consider this a matter of periodic maintenance.

6.4.1 Bearing Capacity and Settlement

The structural mat foundation shall be designed as a rigid structure that will resist cracking. An allowable bearing capacity of 1,000 psf may be used for design purposes. The allowable bearing value applies to combined dead and sustained live loads. The allowable bearing pressure may be increased by one-third when considering transient live loads, including seismic and wind forces.

Based on the allowable bearing value recommended above, the total settlement of the mat, including static and dynamic, is not expected to exceed 4 inches. The differential settlement is not expected to exceed 2 inches.

6.4.2 Modulus of Subgrade Reaction

The modulus of subgrade reaction, k_s , is a not a fundamental soil property, and its magnitude depends on many factors, including the width of loaded area, the shape of loaded area, the depth of the loaded area below grade, the position of mat, and time. The structures' shapes and loading conditions have not been finalized; therefore, the k_s values should be reviewed once this information is known.

For preliminary design purposes, k_s values of 150 to 300 pounds per cubic inch (corresponding to the center and edge of building, respectively) may be used. These values are based on a pseudo-coupled method and elastic theory.

6.4.3 Lateral Load Resistance

Lateral load resistance for the mat will be developed by passive soil pressure against the thickened edges and by friction acting at the base of the mat bearing on compacted fill. An allowable passive pressure of 250 psf per foot of depth, beginning from 1 foot below the lowest adjacent grade, may be used for design purposes. An allowable passive pressure of 250 psf per foot of depth, beginning from the ground surface, may be used if the thickened edges or footings are located adjacent to exterior slabs. The allowable passive pressure is only applicable for level (ground slope equal to or flatter than 5:1 (horizontal:vertical) conditions. An allowable coefficient of friction of 0.35 may be used for dead and sustained live loads for frictional resistance of the footings constructed directly on compacted fill. A safety factor of 1.5 has been incorporated in the development of both allowable passive and frictional resistance values.

The passive pressure and frictional resistance may be increased by 1/3 under seismic and wind loading conditions. The lateral load resistance may combine the passive pressure and frictional resistance; however, the passive resistance may not exceed ½ of the combined total lateral resistance

6.5 POOL

As mentioned, the pool foundation shall be supported on piles. To mitigate the effects of total and differential settlement beneath the pool, we recommend the pool shell be designed as a rigid unit that will resist cracking. The pool shall be designed and constructed in accordance with the requirements of LADBS Information Bulletin P/BC 2014-014.

6.5.1 Uplift Forces

Based on the results of our investigation and the proposed pool plan, the bottom of the pool will extend about 6 to 7 feet below groundwater. There is the potential for significant hydrostatic uplift pressures to buildup below the pool. The pool shall be designed to accommodate uplift forces associated with high groundwater. Furthermore, the uplift forces shall assume an empty pool condition. Typical foundation designs to help resist hydraulic uplift pressures may include increasing the weight of the structure(s), extending the foundation slab beyond the walls of the pool, tying down the pool with tension piles, or using a combination of these systems.

6.5.2 Pool Walls

The pool walls shall be designed to retain the surrounding soil using an equivalent "at-rest" fluid pressure of 60 pounds per cubic foot (pcf). As mentioned, undrained conditions will exist behind the wall due to high groundwater. Therefore, the equivalent fluid pressure below groundwater (depth of approximately 6½ feet), should be 95 pcf to account for hydrostatic forces behind the wall. The lateral earth pressure diagram for the pool walls is presented on Figure 10. The recommended lateral earth pressure value assumes that the surface of the backfill behind the retaining walls is close to horizontal (inclination of 5:1 or flatter). The foregoing lateral earth pressure assumes non-expansive backfill behind the pool walls.

If surcharge loads (live or dead) are applied, they should be added to the at-rest earth pressure by applying a uniform (rectangular) pressure. The lateral earth pressure coefficient for a uniform vertical surcharge load this is applied behind the pool wall(s) is 0.50 for an at-rest condition.

The seismically induced increment was estimated using the provisional recommendations by Lew et al. (2010) and the Mononobe-Okabe (M-O) method. The horizontal acceleration used in the (M-O) method, k_h , was assumed to be 1/3 of the PGA_M. The PGA_M at the project site is equal to 0.73g; therefore, k_h , was assumed to be 0.24g. Also, a total unit weight of 120 pcf was assumed for the site soil. The total active pressure during the earthquake, P_{AE} , was calculated to be 61 pcf. The static active and at-rest were calculated to be 40 and 60 pcf, respectively.

According to Lew et al. (2010), if a seismic earth pressure increment is determined using the M-O method, it should be added to the active earth pressure and not to the at-rest pressure. Thus, we subtracted the at-rest pressure (60 pcf) from P_{AE} (61 pcf), which results in a seismically induced increment of 1 pcf. However, we recommend using a minimum seismic pressure increment of 10 pcf.

6.6 PLANTER AND FENCE WALL AND NON-STRUCTURAL FOUNDATIONS

Spread footing foundations are suitable for the support of accessory walls less than 8 feet in height that are structurally isolated. Footings with a minimum width of 18 inches and embedded a minimum of 18 inches below the lowest adjacent grade, bearing on properly compacted fill, may be designed for an allowable bearing capacity of 1,200 pounds per square foot (psf). The allowable bearing capacity includes dead-load and sustained liveloads. The value may be increased by one-third for short durations of loading which will include the effect of wind or seismic forces.

Resistance to lateral loads may be designed in accordance with the recommendations provided in Section 6.4.3 of this report.

6.7 DRAINAGE

Final grades should be sloped to direct surface water away from foundations and slabs and towards discharge facilities. Surface water should not be allowed to pond anywhere onsite. Water from downspouts, if any, should be collected in closed pipes and conveyed to storm drains or other appropriate discharge locations.

6.8 UTILITY CONNECTIONS

There is a potential for damage to occur to utilities as a result of settlement, especially where they transition from the exterior to the interior of structures. Utilities (sewer, gas, area drains, water pipes etc.) should be designed with flexible connections to account for expected settlement. If possible, we recommend consulting with someone who specializes in the design of utility pipes, and if possible, they should work together with the project structural engineer.

6.9 SULFATE ATTACK RESISTANCE

The results of the sulfate concentration tests indicate that, based on the American Concrete Institute (ACI, 2008) criteria, the near surface soils have moderate sulfate attack potential on concrete. Refer to ACI 318-08 for appropriate concrete mix design. Concrete that will be exposed to sulfate-containing solutions or soils shall comply with the maximum water-cementitious materials ratios and/or minimum specified compressive strength and be made with the appropriate type of cement in accordance with ACI 318-08, Section 4.3.

6.10 FEASIBILITY OF STORMWATER INFILTRATION

The City of Los Angeles Low Impact Development Best Management Practices (LID BMP) Handbook (2011) presents screening guidelines for determining if a site is feasible for stormwater infiltration. There appears to be a wide range of soils that were encountered near the proposed infiltration depth, as presented on Table 1 in Appendix A. All eight of the adjusted infiltration rates were above 0.5 in/hr, which is considered to be a "Feasible" rate. However, the relatively shallow depth to groundwater may preclude this site from being suitable for onsite infiltration. The LID BMP considers a site to be "Infeasible" if the distance between the bottom of the infiltration facility and seasonal high groundwater is less than 5 feet. Based on the groundwater criterion, the project site can be classified as a Category 3 or "Infeasible" for onsite infiltration is "Feasible" at this site, we recommend infiltration pits be located at least 50 feet away from structures.

6.11 PRELIMINARY PAVEMENT DESIGN

Based on the results of the laboratory test on a bulk surficial soil sample, the existing sandy silt has a resistance value (R-value) of 26. It is recommended that samples of the prepared subgrade be collected and tested following grading to confirm the pavement design sections provided in this section. Recommendations for asphalt concrete pavement design sections are presented below. In all pavement areas, the uppermost 12 inches of soil subgrade should be compacted to a minimum 95 percent RC.

Layer	Traffic Index = 5.0	Traffic Index = 6.0	Traffic Index = 7.0	Traffic Index = 8.0
Asphalt Concrete (AC)	2.5	3.0	4.0	4.5
Crushed Aggregate Base (CAB)	7.0	9.0	10.0	12.0
Compacted Subgrade	12	12	12	12

TABLE 2	2 – RECOMMENDED	AC PAVEMENT	SECTION LAYER	THICKNESSES ((INCHES)

Crushed aggregate base (CAB) shall conform to Section 200 of the latest edition of the Brownbook. CAB shall be compacted to at least 95 percent RC.

7.0 SUPPLEMENTAL GEOTECHNICAL SERVICES

7.1 REVIEW OF PLANS AND SPECIFICATIONS

The grading and foundation plans and specifications should implement the recommendations presented in this report and should be reviewed by GEO to ensure proper interpretation and application of our recommendations.

7.2 GEOTECHNICAL OBSERVATION AND TESTING DURING CONSTRUCTION

All grading, excavation, and construction of foundations should be performed under the observation and testing of the Geotechnical Engineer during the following stages:

- Demolition;
- Pile Indicator program;
- Pile load testing;
- Completion of site clearing;
- Site and pool excavation;
- Installation of shoring;
- Production pile installation;
- Subgrade preparation;
- Fill placement;
- Construction of structural mat foundations for accessory structures;
- Excavation and backfilling of all utility trenches; and
- When any unusual or unexpected geotechnical conditions are encountered.

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8.0 CLOSURE

If you have any questions regarding this report, please contact Easton Forcier at (213) 847-0476.



5-27-15

Easton Forcier, GE 2948 Geotechnical Engineer I

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REFERENCES

- American Concrete Institute, 2008, Building Code Requirements for Structural Concrete (ACI 318-08), and Commentary, January.
- Bray, J.D., and Sancio, R.B., 2006, Assessment of the Liquefaction Susceptibility of Fine-Grained Soils, Journal of Geotechnical and GeoEnvironmental Engineering, ASCE, Vol. 132, No. 9, p.1165-1177.
- Brown, D.A., O'Neill, M.W., Hoit, M., McVay, M., El Naggar, M.H., and Chakraborty, S., 2001, Static and Dynamic Lateral Loading of Pile Groups, NCHRP Report 461, Transportion Research Board National Research Council.
- California Department of Conservation, Division of Mines and Geology, 1998, Seismic Hazard Zone Report for the Hollywood 7.5-Minute Quadrangle, Los Angeles County, California, Report 026.
- California Department of Conservation, Division of Mines and Geology, 1999, Seismic Hazard Zones, Hollywood Quadrangle, March 25.
- California Department of Transportation (Caltrans), 2015, Caltrans ARS Online (v2.3.06), http://dap3.dot.ca.gov/ARS_Online/index.php
- California Department of Transportation (Caltrans), 2012, Corrosion Guidelines, Version 2.0, November.
- California Geological Survey, 2014, Earthquake Zones of Required Investigation, Hollywood Quadrangle, November 6.
- City of Los Angeles Building Code, 2014.
- City of Los Angeles, Department of Building and Safety, 2014, Letter to consultants regarding liquefaction evaluation requirements, July 16.
- City of Los Angeles, 2011, Development Best Management Practices Handbook, Low Impact Development Manual, Part B Planning Activities, 4th Edition, June.
- Dibblee, Thomas W. Jr., 1991, Geologic Map of the Hollywood and Burbank (South ½) Quadrangles, Los Angeles County, California, DF-30, May.

Ensoft, Inc., 2013, LPILE.

Lew, M., Sitar, N., Al Atik, L., Pourzanjani, M., and Hudson, M.B., 2010, Seismic Earth Pressures on Deep Building Basements, SEAOC 2010 Convention Proceedings.

NavigateLA, City of Los Angeles, 2015, http://boemaps.eng.ci.la.ca.us/navigatela/

Seed, H.B., and Harder, 1990, SPT-Based Analysis of Cyclic Pore Pressure Generation

and Undrained Residual Strength, H.B. Seed Symposium, Berkeley, California, BiTech Publishing Ltd., Vol. 2, p.351-376.

- Tokimatsu, K., and Seed, H.B., 1987, Evaluation of Settlements in Sands Due to Earthquake Shaking, Journal of Geotechnical Engineering, Vol. 113, No. 8, p. 861-878.
- United States Department of Transportation, Federal Highway Administration, 2006, Design and Construction of Driven Pile Foundations, Reference Manual, Volume 1, Publication No. FHWA-NHI-05-042.

United States Geological Survey, 2008, http://geohazards.usgs.gov/deaggint/2008/

Youd, T.L., Idriss, I.M., Andrus, R.D., Arango, I., Castro, G., Christian, J.T., Dobry, R., Finn, L.D., Harder, L.F., Hynes, M.E., Ishihara, K., Koester, J.P., Liao, S.C., Marcusson, W.F., Martin, G.M., Mitchell, J.K., Moriwaki, Y., Power, M.S., Robertson, P.K., Seed, R.B., and Stokoe, K.H., 2001, Liquefaction Resistance of Soils: Summary Report From the 1996 NCEER and 1998 NCEER/NSF Workshop on Evaluation of Liquefacton Resistance of Soils, Journal of Geotechnical and GeoEnvironmental Engineering, ASCE, Vol. 27 (10), p. 817-833.

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FIGURES




















APPENDIX A

Architectural Plans and Sections

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APPENDIX B

Geotechnical Data Report by Willdan Geotechnical Dated April 28, 2015

APPENDIX C

Geotechnical Data Report by City of Los Angeles, Department of General Services, Standards Division

CITY OF LOS ANGELES DEPARTMENT OF GENERAL SERVICES STANDARDS DIVISION

RANCHO CIENEGA SPORTS COMPLEX

LAB NO. 140-6036

W.O NO. E1907694 MAY 2015

GEOTECHNICAL SERVICES FILE: 15-002

CITY OF LOS ANGELES DEPARTMENT OF GENERAL SERVICES STANDARDS 2319 DORRIS PLACE LOS ANGELES, CA 90031 (213) 485-2242 fax (213) 485-5075

Lab. No.: 140-6036

Received: 04-15-15

Reported: 05-15-15

TO:

Gary L. Moore, City Engineer. Public Works / Bureau of Engineering

Attention: Christopher Johnson

Report of SUBSURFACE INVESTIGATION

Transmitted are the results of subsurface investigation performed by Standards on the above-named project as requested by the Geotechnical Engineering Group (GEO) of the Bureau of Engineering. The descriptions reported on the "Log of Test Boring" sheets are based on field identification procedures. The soil classification is based on the attached Unified Soils Classification System.

Three test borings were drilled on this project with a truck-mounted Central Mine Equipment Model-75HT drill rig using six-inch diameter conventional flight augers. There were no samples obtained and the main purpose of the investigation is to measure the groundwater depth in each boring 24 hours following completion of the drilling.

Geotechnical Engineering Group gave the Drilling Testing Request with the subsurface investigation to Standards on 04-15-15. Easton Forcier of your Bureau was notified at least 48 hours prior to the drilling operations. A boring location map is included in this report.

RAY H. SOLOMON, Director General Services/Standards

RHS:JV:PK:m

Rancho Cienega Sports Complex

W.O.No. E1907664 File No. 15-002



		KEY TO SYMBOLS
	Symbol	Description
	Strata	symbols
		AC pavement.
		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		Poorly graded sands or gravelly sands, little or no fines
	Misc S	ymbols
		Water table at boring completion
	n din Ma	Water seepage
]	Notes: 1. Three	exploratory borings were drilled on 04/29/15 with a CME-75HT using
	2. Free w	ater was encountered during the drilling of this project.
	3. Boring verifi	locations were provided by Geotechnical Engineering Group and ed by Standards.
4	Abbrev: N/o = 1 S/o = 2 E/o = 0 W/o = 1 CL = 0 AC = 2 OVA = 0 PPM = p	iations used on logs:NCF = north curb faceNE = northeastnorth ofNCF = north curb faceNW = northwestsouth ofSCF = south curb faceNW = northwesteast ofECF = east curb faceSE = southeastwest ofWCF = west curb faceSW = southwestcenter linePL = property lineasphalt concretePCC = Portland cement concreteorganic vapor analyzerLEL = lower explosive limitparts per millionHT = high torque
5	The str represe transit	ratification lines indicated on the boring maps and profiles ant the approximate boundary between material types and the tion may be gradual.
6	. The mat	erials, boundaries, and conditions have been established only

at the boring locations, and are not necessarily representative of subsurface conditions elsewhere across the site.

UNIFIED SOIL CLASSIFICATION SYSTEM *

M	AJOR DIVIS	IONS	GR SYM	OUP BOLS	TYPICAL NAMES					
		CLEAN GRAVELS		GW	Well graded gravels, gravel-send mixtures, little or fines.					
	GRAVELS (More than 50 %	(Little or no fines)		GP	Poorly graded gravals or gravel-sand mixtures, little no finas.					
COARSE	of coarse fraction is LARGER than the No.4	GRAVELS WITH FINES		GM	Silt gravele, gravel-send-silt mixturee.					
GRAINED SOILS	319A9 21391	(Appreciable amount of (ines)		GC	Clayey gravels, graval-sand-siny mixtures,					
More than 50% of material is LARGER then		CLEAN		SW	Well graded cands, gravely sends, little or no fines.					
No.200 sieva size)	SANDS (Mora than 50%	(Little or no (ines)		SP	Poorly graded sands or gravally sands, little or no fines.					
	of coerse fraction is SMALLER than the No.4	SANDS WITH FINES		SM	Silty cands, cond-cilt mixtures.					
	6la∨a size}	(Appreciable amount of fines)		SC	Clayey sends, send-clay mixtures.					
				ML	Inorganic silts and very fine sands, rock flour, silty o clayey fine sands or clayey silts with slight plasticity					
FINE	SILTS AN (Liquid fimit)		CL	Inorganie Tys of low to madium plasticity, gravely clays, sandy clays, sifty clays, lean clays.						
GRAINED SOILS				OL Organic silts and organic silty clays of Ic						
fore than 50% of material is SMALLER than	SILTS AN	DCLAYS		мн	norganic silts, micaceous or diatomaceous fina s: or silty soils, elastic silts,					
o.200 sieve size)	Liquid limit GRi	EATER than 50)	9 9 9 1 9 9 9 1 9 9 9 1	СН	norganic clays of high plasticity, fat clays.					
	23			он ,	Organic clays of medium to high plasticity, organic silts,					
HIGHLY	ORGANIC	SOILS		Pt	Peat and other highly organic solls.					
BOUNDARY CL	ASSIFICATIONS:	Soils possesssing char combinations of grou	acteristics p symbols	of two ç	groups are designated by					
	PART	CLE	S I	ΖE	LIMITS					
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SILI OR CL	ŖΥ FINI	MEDIUM COA	RSE	FINE	COBBLES BOULDERS					
•	No.200	No.40 No.10	No:4	JE VE	4 in. 3 in. 12 in.					

Reference: The Unified Soil Classification System, Corps of Engineers, U.S. Army Technical Memorandum No. 3-357, Vol. I, March 1953. [Revised April, 1960]

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CITY OF LOS ANGELES DEPARTMENT OF GENERAL SERVICES STANDARDS DIVISION 2319 DORRIS PLACE LOS ANGELES CA 90031 (213) 485-2242 4

LOG OF TEST BORING PROJECT: Rancho Cienega Sports Complex LAB. NO.: 140- 6036 BORING NO .: HSA-1 ELEVATION: 104' **DRILLING DATE: 04-29-15** BORING COORDINATES .: 34° 01' 21.20" North & 118° 21' 04.88" West DRILL RIG TYPE: CME-75HT using 6" conventional flights augers **DEPTH TO STANDING WATER:** 20' (initially) **DEPTH TO WATER SEEPAGE:** 20' (initially) LOGGER: Roth DRILLER: Cooksey **ENGINEER:** None present ELEVATION / SOIL SYMBOLS, SAMPLER SYMBOLS USCS **Field Description** DEPTH (ft) AND BLOWS/INCHES 0 3" AC sidewalk in good condition. ML Brown clayey silt with a trace of sand; moist. 100 5 95 10 90 15 Soil color changed to dark gray at 17' depth. 85 20 - 22 Encountered perched groundwater at 20' depth. 85 25 Groundwater depth \cong 9' as of 5/5/15. 75 30 70 35 65

CITY OF LOS ANGELES - STANDARDS DIVISION _

LOG OF TEST BORING

LAB. NO.: 140- 6036

PROJECT: Rancho Cienega Sports Complex

BORING NO.: HSA-2

ELEVATION: 105 **DRILLING DATE:** 04-29-15

BORING COORDINATES.: 34° 01' 20.48" North & 118° 21' 01.29" West

DRILL RIG TYPE: CME-75HT using 6" conventional flights augers

DEPTH TO STANDING WATER: 14' (initially) DEPTH TO WATER SEEPAGE: 14' (initially)

DRILLER: Cooksey

LOGGER: Roth

ENGINEER: None present

ELEVATION / SOIL SYMBOLS, SAMPLER SYMBOLS DEPTH (ft) AND BLOWS/INCHES	USCS	Field Description
105 0	ML	Gray clayey silt with a trace of sand; moist.
100 5		
95 10		Moisture content increased at 11' depth.
90 15		Encountered perched groundwater at 14' depth.
85 20		
80 25		Encountered a 6" black organic lense at 23' depth.
		Groundwater depth \cong 6½' as of 5/5/15.
75 30		
70 - 35		
Ц СП	Y OF LC	DS ANGELES - STANDARDS DIVISION

LOG OF TEST BORING PROJECT: Rancho Cienega Sports Complex

LAB. NO.: 140- 6036

ELEVATION: 104' DRILLING DATE: 04-29-15

BORING NO.: HSA-3

ELEVATION. 104 D

BORING COORDINATES.: 34° 01' 19.87" North & 118° 21' 06.52" West

LOGGER: Roth

DRILL RIG TYPE: CME-75HT using 6" conventional flights augers DEPTH TO STANDING WATER: None (initially) DEPTH TO WATER SEEPAGE: None (initially)

DRILLER: Cooksey

ENGINEER: 1

ENGINEER: None present



APPENDIX D

Liquefaction Triggering Analyses

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APPENDIX E

Lateral Load Behavior of Driven Steel Piles
























APPENDIX E Noise and Vibration Impact Study



Prepared for

AECOM

Prepared by

TERRY A. HAYES ASSOCIATES INC.

OCTOBER 2015

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TECHNICAL APPENDIX

Appendix A Noise Data and Calculations

1.0 SUMMARY OF FINDINGS

Terry A. Hayes Associates Inc. (TAHA) completed a noise and vibration impact analysis for the Rancho Cienega Sports Complex Project (proposed project). The analysis assessed construction and operational impacts associated with the proposed project. Impact conclusions are shown in **Table 1-1**. With mitigation, the proposed project would result in less-than-significant impacts from noise and vibration.

TABLE 1-1: SUMMARY OF IMPACT STATEMENTS				
Impact Statement	Proposed Project Level of Significance	Applicable Mitigation Measures		
Would the proposed project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less-than-Significant Impact With Mitigation	N1 though N9		
Would the proposed project expose people to or generate excessive ground-borne vibration or ground-borne noise levels?	Less-than-Significant Impact With Mitigation	N7		
Would the proposed project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Less-than-Significant Impact	None		
Would the proposed project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Less-than-Significant Impact	N1 though N9		
Would the proposed project expose people working or residing in the project area to excessive noise associated with an airport land use plan or within two miles of a public airport	No Impact	None		
Would the proposed project expose people working or residing in the project area to excessive noise associated with a private airstrip	No Impact	None		

Mitigation Measures

- **N1** Construction equipment shall be properly maintained and equipped with mufflers.
- **N2** The pile driver points of impact shall equipped with a sound apron made of sound absorptive material or dampeners. As discussed in the *Federal Highway Administration Construction Noise Handbook*, sound aprons consist of sound absorptive mats hung from construction equipment or on frames attached to equipment.
- **N3** Construction equipment shall have rubber tires instead of tracks.
- **N4** Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

- **N5** A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.
- **N6** The construction manager shall coordinate with the site administrator for Dorsey High School to schedule construction activity such that student exposure to noise is minimized.
- **N7** Pile driving activity shall be limited to between 9:00 a.m. and 3:00 p.m.
- **N8** The public shall be notified in advance of the location and dates of construction hours and activities.
- **N9** As mandated in the *Los Angeles Municipal Code Section 41.40,* construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to increased nighttime noise levels.

2.0 INTRODUCTION

2.1 PURPOSE OF REPORT

The purpose of this report is to evaluate the potential noise and vibration impacts associated with the proposed project.

2.2 **PROJECT DESCRIPTION**

2.2.1 Introduction

The proposed Rancho Cienega Sports Complex Project (proposed project) includes the development of a new sports complex in the City of Los Angeles Council District 10. The proposed project would construct a new 30,000 square-foot sports complex that would include a new indoor pool and bathhouse with a community room and weight room on the second floor; a new indoor gymnasium with office space, a running path, and a lookout deck on the second floor; a new tennis shop with restrooms and tennis overlook; a new stadium overlook with a concession stand, restrooms and a ticket office; and installation of new driveways and parking. The proposed project would also renovate the existing City of Los Angeles Department of Recreation and Parks (LARAP) maintenance yard and building. Other site improvements include upgrades to existing parking, security lighting, additional stormwater and drainage infrastructure, landscaping, and hardscaping.

2.2.2 Location

The project site is located at 5001 Rodeo Road in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The project site is bounded by the Los Angeles County Metropolitan Transportation Authority (Metro) Expo Line light rail transit system to the north (along Exposition Boulevard), Dorsey High School to the east, residential land uses to the south, and commercial uses to the west. Regional access to the project area is provided via Interstate 10 (I-10) and Interstate 405 (I-405). **Figure 2-1** shows the location of the project site.

2.2.3 Setting

The project site is currently developed as a sports complex. The existing complex contains a variety of facilities including a gymnasium, basketball courts, baseball diamond, child play area, community room, football field, handball courts, picnic tables, soccer field, skate park, and tennis courts. The sports complex also includes the Jackie Robinson Stadium, used for track and field events, concerts, and other special events, and the Celes King III Pool facility, an indoor year-round pool used for various pool programs. Vehicular access to the project site is provided via Rodeo Road on the south side and via Exposition Boulevard on the north side. The primary parking lot is located along the southern boundary adjacent to Rodeo Road. An additional overflow parking area is located in the northwest area of the complex. The area surrounding the project site is fully developed and highly urbanized, and characterized by single and multiple family residences, industrial uses, commercial uses, and public facilities. The properties to the north of the project site; and residential uses are located to the south and east of the project site.



LEGEND: Project Site

SOURCE: TAHA, 2015.



Rancho Cienega Sports Complex Project Noise and Vibration Impact Study taha 2015-043 City of Los Angeles

PROJECT LOCATION

500

FIGURE 3-2

2.2.4 Purpose

The overall purpose for the proposed project is to construct a community sports complex to better meet the community's recreational needs. The existing sports complex is insufficient to handle the current park programs due to its size and infrastructure. The gymnasium's aging infrastructure has become a maintenance concern. Additionally, the existing indoor pool (Celes King III Pool) no longer meets the standards for competition pools. The need for a fitness annex and multipurpose room has been made evident by the community's use of the existing childcare facility to accommodate those functions.

2.2.5 Proposed Project

The proposed project would be implemented in two phases. The components proposed to be implemented in each phase are described below. The detailed construction process and schedule for both phases is described in Subsection G, Project Construction. Figure 4 depicts the proposed project facilities.

Phase 1

Phase 1 would include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the project site and include the following:

- **Indoor Gymnasium**: Demolition of the existing gymnasium and construction of a new, approximately 24,000-square-foot indoor gymnasium east of the Jackie Robinson Stadium and north of the primary parking lot. The proposed indoor gymnasium would include office space, a running path, and a lookout deck on the mezzanine level, and a second floor walkway that would connect the proposed indoor gymnasium to the proposed indoor pool.
- Indoor Pool and Multiuse Building: Demolition of the existing restroom facilities and construction of a new, approximately 25,000-square-foot indoor pool and bathhouse facility in the central portion of the property adjacent to the existing childcare center and north of the proposed primary parking area. The new indoor pool facility would include a bathhouse, restrooms, lockers, and changing rooms on the ground floor, and a community room, weight room, and kitchen on the mezzanine level.
- **Tennis Shop/Overlook**: Demolition of the existing tennis shop located directly north of the Celes King III Pool, and construction of a new 1,900-square-foot tennis shop and restroom facility to the west of and adjacent to the existing tennis courts, and east of the existing childcare center. A new overlook would be constructed on the mezzanine level to provide a viewing area of the tennis courts.
- **Stadium Overlook/Concession Stand**: Construction of a new stadium overlook and concession stand east of and adjacent to the existing stadium. The facility would include a include a concession stand, restrooms, and a ticket office on the ground level, and a stadium overlook on the mezzanine level, totaling approximately 4,000 square feet.
- **Playground**: Demolition of the existing playground located between the existing childcare center and tennis courts, in order to accommodate the new tennis shop and restroom facility. A new playground would be constructed directly west of the proposed tennis shop.

• **Primary Parking Lot**: Grading of the existing parking lot located along Rodeo Road and driveway improvements.

Phase 2

Phase 2 would include demolition of the concrete surrounding the existing LARAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The majority of the Phase 2 activities would occur in the western and northwestern portion of the project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the project site. The Phase 2 components include the following:

- LARAP Maintenance Yard and Refuse Collection Center: Rehabilitation of the existing LARAP maintenance building and relocation of the LARAP maintenance yard adjacent to the northwest corner of the Jackie Robinson Stadium. A new maintenance yard and refuse collection center would be constructed adjacent to the rehabilitated LARAP maintenance building.
- **Northwestern Driveway**: Construction of a new driveway at the northwestern boundary of the project site. The driveway would extend towards Exposition Boulevard that currently ends at the parking lot on the northwestern part of the property.
- **Controlled Driveway**: Construction of a new controlled driveway at the southwest corner of the project site near the Jackie Robinson Stadium. The driveway would allow ingress/egress access from Rodeo Road when additional parking is required for special events or community programs. Bollards would be located at the driveway to prohibit access during normal operations.
- **Off-street Parking**: Installation of off-street parking along the western boundary of the project site, adjacent to the Jackie Robinson Stadium. Additional off-street parking would be installed along the northwestern boundary of the project site, adjacent to the new driveway and Metro Expo Rail Line. With installation of off-street parking, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements.
- **Overflow Parking/Multipurpose Field**: Alteration of the existing overflow parking lot in the northwestern portion of the project site to a new joint use overflow parking area and multipurpose field. Based on scheduling, the overflow parking area could be used as a multipurpose field for sporting events or for overflow parking.
- **Community Garden:** Construction of a one-acre community garden in the northwestern portion of the project site, north of Jackie Robinson Stadium and adjacent to the proposed overflow parking/multipurpose field.

2.2.6 Project Construction

The construction of the proposed project is anticipated to begin in fourth quarter 2016 and is expected to last for 2.5 years, ending in early 2019. Phase 1 activities would last approximately 17 months and Phase 2 activities would last approximately 10 months.

Construction of the proposed project would entail the delivery of building materials such as concrete, lumber, landscaping materials, etc. Construction staging of equipment and materials

would occur within a portion of the primary parking lot along Rodeo Road and the overflow parking lot at the rear of the complex off of Exposition Boulevard. Trucks delivering construction equipment and materials to the project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the project site. Alternatively, trucks carrying demolition debris from the project site would travel from the project site, west on Rodeo Road, and north on La Brea Avenue to I-10. Construction workers would park in the rear parking lot off of Exposition Boulevard to ensure parking is available for park patrons.

Project construction would occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. If necessary, construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays and National Holidays. There would be no construction activities on Sundays and no construction would occur during prohibited hours.

2.2.7 Operation and Maintenance

Operation and maintenance would be the responsibility of LARAP. LARAP would be responsible for continuing to maintain the complex, including the new indoor pool and indoor gymnasium. Following construction, the number of staff would remain the same as existing conditions with 20 staff for the gymnasium and childcare center, 20 staff for the pool facility, and 10 maintenance staff.¹

As the proposed project would update existing facilities at the sports complex, no additional parking would be required for project operations. Off-street parking areas would be installed along the northwestern boundary of the project site. However, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements. When the new multipurpose field is used for parking during special events, an additional 88 spaces would be available to park patrons, for a total of 499 parking spaces in the overall park. The complex would typically operate Mondays through Saturdays from 7:30 a.m. to 5:00 p.m. Special events, such as football games, would extend the operating schedule to 10:00 p.m. up to 25 times a year.

2.2.8 **Project Actions and Approvals**

The proposed project would require approval by the City of Los Angeles Board of Public Works and City Council. Additional anticipated approvals or permits for the proposed project include, but are not limited to, the following:

- State Water Resources Control Board/Los Angeles Regional Water Quality Control Board project review and National Pollutant Discharge Elimination System General Construction Permit, as applicable;
- City of Los Angeles Department of Building and Safety, building and grading permits and review of import/export routes (haul routes);
- City of Los Angeles Department of Transportation, Traffic Control Plan review; and
- City of Los Angeles Department of Recreation and Parks, project and design review.

¹ Staff numbers are based on increased need during summer.

3.0 NOISE & VIBRATION

This section describes the characteristics of noise and vibration, discusses the applicable regulatory framework, defines the existing setting, and evaluates noise and vibration levels associated with the proposed project.

3.1 NOISE AND VIBRATION CHARACTERISTICS AND EFFECTS

3.1.1 Noise

Characteristics of Sound

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch).² The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. **Figure 3-1** provides examples of A-weighted noise levels from common sounds.

Noise Definitions

This noise analysis discusses average sound levels in terms of Equivalent Noise Level (L_{eq}) and Day-night Noise Level (L_{dn}).

Equivalent Noise Level (L_{eq}). L_{eq} is the average sound level for any specific time period, on an energy basis. The L_{eq} for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. L_{eq} is expressed in units of dBA.

Day-night Noise Level (L_{dn} or DNL). L_{dn} is a 24-hour L_{eq}, or the energy-averaged result of 24 onehour L_{eq}, except that the nighttime hours (10:00 p.m. to 6:00 a.m.) are assessed a 10-dBA penalty. This penalty accounts for the fact that nighttime noise levels are potentially more disturbing than equal daytime noise levels.

Effects of Noise

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, the nature of work or human activity that is exposed to the noise source.

Audible Noise Changes

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and may evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would likely cause a community response.

²California Department of Transportation, *Technical Noise Supplement*, November 2009.



SOURCE: Cowan, James P., Handbook of Environmental Acoustics



FIGURE 3-1

A-WEIGHTED DECIBEL SCALE

Noise levels decrease as the distance from the noise source to the receiver increases. Noise levels generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces (e.g., pavement) and 7.5 dBA over soft surfaces (e.g., grass) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet over hard surface from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise levels generated by a mobile source will decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of the distance.

Generally, noise is most audible when traveling by direct line-of-sight.³ In urban environments, barriers, such as walls, berms, or buildings, are often present, which breaks the line-of-sight between the source and the receiver, greatly reducing noise levels from the source since sound can only reach the receiver by bending over the top of the barrier (diffraction). However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced. In situations where the source or the receiver is located 3 meters (approximately 10 feet) above the ground, or whenever the line-of-sight averages more than 3 meters above the ground, sound levels would be reduced by approximately 3 dBA for each doubling of distance.

3.1.2 Vibration

Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as rock blasting, pile driving, and heavy earth-moving equipment.

Vibration Definitions

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The Vdb acts to compress the range of numbers required to describe vibration.⁴

Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of vibration may damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes).

³Line-of-sight is an unobstructed visual path between the noise source and the noise receptor. ⁴Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

Perceptible Vibration Changes

In contrast to noise, vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 Vdb RMS or lower, well below the threshold of perception for humans which is around 65 Vdb RMS.⁵ Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

3.2 REGULATORY SETTING

3.2.1 Noise

Federal

United States Environmental Protection Agency (USEPA). The Noise Control Act of 1972 established programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, the USEPA determined that subjective issues such as noise would be better addressed at local levels of government, thereby allowing more individualized control for specific issues by designated federal, state, and local government agencies. Consequently, in 1982, responsibilities for regulating noise control policies were transferred to specific federal agencies, and state and local governments. However, noise control guidelines and regulations contained in the USEPA rulings in prior years remain in place.

U.S. Department of Housing and Urban Development (HUD). The HUD Noise Guidebook general policy establishes that responsible entities under 24 Code of Federal Regulations (CFR) Part 58 must take into consideration the noise criteria and standards in the environmental review process and consider ameliorative actions when noise sensitive land development is proposed in noise exposed areas. Responsible entities shall address deviations from the standards in their environmental reviews as required in 24 CFR Part 58.

Subpart B (Noise Abatement and Control) of 24 CFR Part 51 includes exterior noise standards for the construction of new buildings or other new facilities containing noise sensitive land uses. The proposed project is not considered a noise sensitive land use since it will involve the construction of sports and recreational facilities. Therefore, the HUD noise standards related to the construction of new sensitive land uses do not apply to the proposed project.

State

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulations governing noise levels generated by individual motor vehicles and occupational noise control are not applicable to planning efforts, nor are these areas typically subject to California Environmental Quality Act (CEQA) analysis.

Local

The City of Los Angeles has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Regarding construction, Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited) of

⁵Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

the Los Angeles Municipal Code (LAMC) states that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. on Monday through Friday since such activities would generate loud noises and disturb persons occupying sleeping guarters in any adjacent dwelling, hotel, apartment, or other place of residence. Further, no person, other than an individual home owner engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind or perform such work within 500 feet of land so occupied before 8:00 a.m. or after 6:00 p.m. on any Saturday, nor at any time on any Sunday or on a federal holiday. Under certain conditions, the City may grant a waiver to allow limited construction activities to occur outside of the limits described above.

LAMC Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools) specifies the maximum noise level of powered equipment or powered hand tools. Any powered equipment or hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise-reduction device or techniques during the operation of equipment.

3.2.2 Vibration

Federal

The Federal Transit Administration (FTA) has published guidance for assessing building damage impacts from vibration. Table 3-1 shows the FTA building damage criteria for vibration. FTA has also established criteria related to vibration annoyance, which are shown in **Table 3-2**.

TABLE 3-1: CONSTRUCTION VIBRATION DAMAGE CRITERIA			
Building Category	Peak Particle Velocity (inches per second)		
I. Reinforced-concrete, steel or timber (no plaster)	0.5		
II. Engineered concrete and masonry (no plaster)	0.3		
III. Non-engineered timber and masonry buildings	0.2		
IV. Buildings extremely susceptible to vibration damage	0.12		
SOURCE: FTA. Transit Noise and Vibration Impact Assessment, May 2006.			

TABLE 3-2: CONSTRUCTION VIBRATION ANNOYANCE CRITERIA				
	Vibration Impact Level (VdB re micro-inch per second)			
Land Use Category	Frequent	Occasional Events /b/	Infrequent	
1 Buildings where vibration would interfere with interior operations	65 /d/	65 /d/	<u> </u>	
2. Residences and buildings where people normally sleep.	72	75	80	
3. Institutional land uses with primarily daytime use.	75	78	83	
/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 kind per day.

/d/ This criterion limit is based on levels that are acceptable for most moderately-sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors

SOURCE: FTA, Transit Noise and Vibration Impact Assessment, May 2006.

State

There are no adopted State vibration standards.

Local

There are no adopted City of Los Angeles vibration standards.

3.3 EXISTING SETTING

3.3.1 Existing Noise and Vibration Environment

To characterize the existing noise environment around the project site, ambient noise was monitored using a SoundPro DL Sound Level Meter on October 1, 2015, between 11:00 a.m. and 12:30 p.m. The detailed locations are shown in **Figure 3-2**. Measurements were taken for 15-minute periods at each site. As shown in **Table 3-3**, the existing ambient sound levels range between 57.4 and 72.0 dBA L_{eq} . Traffic was the primary source of noise at each site. Possible sources of vibration at the project site include the Metro Expo Line and truck traffic. Based on field visits, neither source generates perceptible vibration on the project site.

TABLE 3-3: EXISTING AMBIENT NOISE LEVELS				
Figure 3-2 Key	Noise Monitoring Location	Sound Level (dBA, L _{eq})		
1	Residences at 3515 South La Brea Avenue	72.0		
2	Rancho Cienega Sports Complex Childcare Center	57.4		
3	Dorsey High School	66.8		
SOURCE: TAHA, 2015.				

3.3.2 Sensitive Receptors

Sensitive receptors are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. They typically include residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas. The project is located in an urban environment and many sensitive receptors are located near the construction zone as shown in **Figure 3-2**. Sensitive receptors in the vicinity of the proposed project site include Dorsey High School adjacent and to the east, residences directly to the south across Rodeo Road, and residences to the east across La Brea Avenue. The project site includes a childcare facility, which is open from 3:00 p.m. to the evening.

3.4 METHODOLOGY AND IMPACT CRITERIA

3.4.1 Methodology

The noise and vibration analysis considers construction and operational sources. Construction noise levels were based on information obtained from USEPA. Noise levels associated with typical construction equipment were obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model.⁶ This model predicts noise from construction operations based on a compilation of empirical data and the application of acoustical propagation formulas. Maximum equipment noise levels were adjusted based on anticipated percent of use. Example equipment noise levels were estimated by making a distance adjustment to the construction source noise level. The methodology used for this analysis can be viewed in Section 2.1.4 (Sound Propagation) of the California Department of Transportation (Caltrans) Technical Noise Supplement.

Vibration levels generated by construction equipment were estimated using example vibration levels and propagation formulas provided by FTA.⁷ The methodology used for the analysis can be viewed in Section 12.2 (Construction Vibration Assessment) of the FTA guidance.

⁶Federal Highway Administration, *Roadway Construction Noise Model*, Version 1.1, August 2006. ⁷Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.



LEGEND:

- **#**
- Project Site Noise Monitoring Location
- 1. Residences at 3515 South La Brea Avenue
- 2. Rancho Cienega Sports Complex Child Care Center
- 3. Dorsey High School

APPROX. SCALE

FIGURE 3-2

SOURCE: TAHA, 2015.



Rancho Cienega Sports Complex Project Noise and Vibration Impact Study

NOISE MONITORING LOCATIONS

3.4.2 CEQA Significance Thresholds

The proposed project would not result in a substantial permanent increase in ambient noise levels or expose persons to excessive noise from public or private airports. Accordingly, this issue is not further analyzed for potential impacts.

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to noise and vibration if it would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose people to or generate excessive ground-borne vibration or ground-borne noise levels;
- Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; and/or
- Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Construction Noise

Based on the LAMC, the proposed project would exceed the local standards and substantially increase temporary construction noise levels if:

- Construction activities would occur within 500 feet of a noise-sensitive use and outside the hours allowed in the LAMC. The allowable hours of construction in the LAMC include 7:00 a.m. to 9:00 p.m. Monday through Friday and 8:00 a.m. to 6:00 p.m. on Saturday. No construction activity is allowed on Sundays or federal holidays; and/or
- Equipment noise levels would exceed 75 dBA L_{eq} at 50 feet unless technically infeasible.

Operational Noise

Based on the potential to generate a noticeable noise increase, as stated by the Caltrans and FTA, the proposed project would have a significant impact related to operational noise if:

• Operational activities would increase noise levels at sensitive receptors by 5 dBA CNEL.

Construction and Operational Vibration

The construction-related vibration analysis considers the potential for building damage and annoyance. Maximum vibration levels were assessed based on pile driving activity, which would be considered as an occasional event happening between 30 and 70 times in one day.

- Vibration levels would exceed 0.3 inches per second at engineered concrete and masonry buildings (e.g., typical residential buildings, schools, commercial centers); and/or
- Vibration levels associated with pile driving would exceed 75 VdB at residences or 78 VdB at Institutional land uses with primarily daytime use.

3.4.3 NEPA Impact Criteria

HUD, the federal lead agency, has established noise standards related to the siting of new sensitive land uses. These standards do not apply to existing sensitive land uses. In addition, the proposed project would not include construction of a new use considered sensitive to noise. Therefore, the determination of adverse noise effects is based on the local noise standards. The determination of adverse vibration effects is based in FTA guidance. The same methodology was used to determine the CEQA level of significance.

3.5 ENVIRONMENTAL IMPACTS

3.5.1 Would the proposed project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (*Less-than-Significant Impact With Mitigation*)

Impact Analysis

Construction

Equipment. Construction activity is anticipated to begin in fourth quarter 2016 and is expected to last for 2.5 years, ending in early 2019. It is estimated that approximately 45 construction personnel would be on-site per day during Phase 1 and approximately 29 during Phase 2. The LAMC allows construction activity to occur Monday through Friday between the hours of 7:00 a.m. and 9:00 p.m., although daily construction would not likely occur after 6:00 p.m. Construction would occur between the hours of 8:00 a.m. and 6:00 p.m. on Saturdays and federal holidays. There would be no construction activities on Sundays, and no construction would occur during prohibited hours.

Typical noise levels from various types of equipment that may be used during construction are listed in **Table 3-4**. The table shows noise levels at distances of 50 and 100 feet from the construction noise source. Construction activities typically require the use of numerous pieces of noise-generating equipment. The noise levels shown in **Table 3-5** take into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, project-related activity (i.e., ground clearing and site preparation) would generate noise levels between 84 and 89 dBA L_{eq} at 50 feet.

TABLE 3-4: NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT			
Construction Equipment	Noise Level at 50 feet (L _{eq} , dBA)		
Backhoe (Skid Loader/Skip Loader)	73.6		
Compactor	76.2		
Concrete Mixer Truck	74.8		
Concrete Pump Truck	74.4		
Crane	72.6		
Dump Truck	72.5		
Excavator	76.7		
Pile Driver	94.3		
Roller	73.0		
SOURCE: FHWA, Roadway Construction Noise Model, Version 1.1, 2008.			

TABLE 3-5: TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS

Construction Method	Noise Level at 50 feet (dBA, L _{eq})
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89
SOURCE: USEPA, Noise from Construction Equipment and Operations, Building	Equipment and Home Appliances PB 206717, 1971

A pile driver would be used for the installation of piles for the foundation of the building. Piles would be installed within the building footprint to an approximate depth of 35 feet. Pile driving would generate the highest noise levels of any construction equipment with a noise level of 94.3 dBA at 50 feet. Pile driving activity would be limited to the initial stages of Phase 1.

The impact analysis is based on the construction limits in the LAMC. Construction activity would comply with the allowable hours of construction in the LAMC, including 7:00 a.m. to 9:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and no construction activity on Sundays or federal holidays. The LAMC limits equipment noise levels to 75 dBA at 50 feet unless technically infeasible. Noise levels from individual pieces of equipment would typically range from 72.5 to 94.3 dBA L_{eq} at 50 feet. Unmitigated noise levels would typically exceed the allowable noise level stated in the LAMC. Therefore, without mitigation, the proposed project would result in a significant impact related to construction noise.

Trucks. In addition to on-site construction activities, noise would be generated off-site by construction-related trucks. A maximum of four daily truck trips would occur during the peak period of construction. A doubling of traffic volume is typically needed to audibly increase noise levels along a roadway segment. An additional four trucks per day would not double the volume on any roadway segment. It is not anticipated that off-site vehicle activity would audibly change average daily noise levels. Therefore, the proposed project would result in a less-than-significant impact related to construction-related off-site noise.

Operations

Typical sources of noise for new projects include increased traffic, mechanical equipment, and parking lots. The proposed project would generate new traffic and there would be no increase in local traffic noise. In addition, activity associated with the proposed land uses would be inside the buildings, and would not include significant sources of stationary noise.

Two new surface parking lots would be constructed under the proposed project. One parking lot would be located on the northwest portion of the project site along Exposition Boulevard. Automobile movements would generate a noise level of approximately 58.1 dBA L_{eq} at a distance of 50 feet.⁸ The nearest land use would be residences located approximately 600 feet to the west along La Brea Avenue. The existing noise level is approximately 72.0 dBA L_{eq} and the parking noise exposure would be 36.5 dBA L_{eq} . The increase in noise from this parking lot would be less than 1 dBA and would not be audible at any sensitive receptor.

Another parking lot would be located on the southwest portion of the project site along Rodeo Road. The nearest land use would be residences located approximately 100 feet to the south across Rodeo Road. The existing noise level is approximately 66.8 dBA Leq and the parking noise exposure would be 52.0 dBA Leq. The increase in noise from this parking lot would be less than 1 dBA and would not be audible at any sensitive receptor. Therefore, the proposed project would result in a less-than-significant impact related to parking noise.

Mitigation Measures:

- **N1** Construction equipment shall be properly maintained and equipped with mufflers.
- **N2** The pile driver points of impact shall equipped with a sound apron made of sound absorptive material or dampeners. As discussed in the *Federal Highway Administration Construction Noise Handbook*, sound aprons consist of sound absorptive mats hung from construction equipment or on frames attached to equipment.

⁸The reference parking noise level is based on a series of noise measurements completed 50 feet from vehicles accessing a parking lot.

- **N**³ Construction equipment shall have rubber tires instead of tracks.
- **N4** Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.
- **N5** A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.
- **N6** The construction manager shall coordinate with the site administrator for Dorsey High School to schedule construction activity such that student exposure to noise is minimized.
- **N7** Pile driving activity shall be limited to between 9:00 a.m and 3:00 p.m.
- **N8** The public shall be notified in advance of the location and dates of construction hours and activities.
- **N9** As mandated in the *Los Angeles Municipal Code Section 41.40*, construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to increased nighttime noise levels.

Significance After Mitigation

Construction. Mitigation Measures **N1** through **N9** are designed to reduce construction noise levels. The equipment mufflers associated with Mitigation Measure **N1** would reduce construction noise levels by approximately 3 dBA. Mitigation Measure **N2** would reduce pile driving noise levels by at least 10 dBA. Mitigation Measures **N3** through **N9**, although difficult to quantify, would also reduce and/or control construction noise levels. Other measures included the following:

- Electric Equipment Electric equipment would generate less noise than diesel equipment but is not widely available and the horsepower associated with electric equipment would not meet project requirements.
- Relocation Removing the affected land uses from the construction zone would eliminate the impact. This measure would not be feasible due to the d associated cost of relocation.
- Window Retrofits Retrofitting windows at affected land uses would reduce noise exposure. This measure would not be feasible due to the number of affected land uses and associated cost of retrofitting considering the temporary nature of the noise from construction.

Mitigation Measures **N1** through **N9** are feasible measures to control noise levels, including engine mufflers. With implementation of these feasible mitigation measures, and based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible. Therefore, the proposed project would result in a less-than-significant impact related to construction noise.

Operations. No significant impacts have been identified related to operational noise. Therefore, no mitigation measures are required.

3.5.2 Would the proposed project expose people to or generate excessive ground-borne vibration or ground-borne noise levels? (Less-than-Significant Impact with Mitigation)

Impact Analysis

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the

ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

On-Site Equipment. The FTA provides vibration levels for various types of construction equipment with an average source level reported in terms of velocity.⁹ Table **3-6** provides estimates of vibration levels for a wide range of soil conditions. The reference levels were used to estimate vibration levels at the sensitive receptors most likely to be impacted by equipment at each location of construction activity. Vibration levels are shown in Table 3-7 and discussed in detail for each construction phase.

TABLE 3-6: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT				
Equipment	PPV at 25 feet (Inches/Second)	Approximate VdB at 25 feet /a/		
Large Bulldozer (excavator)	0.089	87		
Loaded Trucks	0.076	86		
Pile Driver (Impact)	0.644	104		
Small Bulldozer	0.003	58		
/a/ RMS velocity in decibels (VdB) related to 1 micro-inch/second				

SOURCE: Federal Transit Authority, Transit Noise and Vibration Impact Assessment, May 2006.

TABLE 3-7: ESTIMATED VIBRATION LEVELS

	Distance from	Vibration Level Phase 1 (Inches Per Second)		Vibration Level Phase 2 (Inches Per Second)	
Sensitive Receptor	Pile Driving Activity (Feet)	Inches/ Second /a/	VdB	Inches/ Second /a/	VdB
Multi-Family Residences to the South	300	0.0155	72 /b/	0.0021	55 /b/
Multi-Family Residences to the Southwest	450	0.0084	66 /b/	0.0012	49 /b/
Dorsey High School Track	500	0.0072	65 /c/	0.0010	48 /c/
Dorsey High School Nearest Classroom	800	0.0036	59 /c/	0.0005	42 /c/

/a/ Engineered concrete and masonry (no plaster) building damage impact criterion is 0.3 inches per second.

/b/ The applicable annoyance impact criterion for residences experiencing frequent events (i.e., over 70 vibration events from the same source per day) is 75 VdB.

/c/ The applicable annoyance impact criterion for institutional land uses experiencing frequent events (i.e., over 70 vibration events from the same source per day) is 78 VdB

SOURCE: TAHA, 2015.

The maximum vibration levels would be generated during pile driving activity. Vibration levels would be approximately 0.644 inches per second and 104 VdB at 25 feet. The nearest off-site sensitive land use would be approximately 300 feet to the south across Rodeo Road. Pile driving vibration levels would be 0.0155 inches per second and 72 VdB. These levels would be below the significance thresholds of 0.3 inches per second and 75 VdB. In addition, as shown in Table 3-7, vibration levels would not exceed the significance thresholds at any other off-site sensitive land uses, including Dorsey High School.

⁹Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

The project site includes a childcare facility that would be adjacent to construction activity. Vibration levels would exceed the annoyance and building damage thresholds during pile driving activity and the use of heavy-equipment during the construction of the gymnasium and multi-use facility. These vibration levels would be detrimental to the health of the children. Therefore, without mitigation, the proposed project would result in a significant impact related to construction vibration.

Off-Site Trucks. In addition to on-site construction activities, construction trucks on the roadway network have the potential to expose vibration-sensitive land uses located near the proposed project access route. As shown in **Table 3-6**, loaded trucks generate vibration levels of 0.076 inches per second at a distance of 25 feet. Rubber-tired vehicles, including trucks, do not generate significant roadway vibrations that can cause building damage. It is possible that trucks would generate perceptible vibration at sensitive receptors adjacent to the roadway. However, these would be transient and instantaneous events typical to the roadway network. This level of activity is not considered substantial enough to generate a vibration annoyance. Therefore, construction truck activity would result in a less-than-significant impact related to vibration.

Operations

The primary sources of proposed project operational-related vibration would include vehicles traveling to the project site for events and recreational activities. Vehicular movements would generate similar vibration levels as existing traffic conditions. The proposed project would not introduce any significant stationary sources of vibration, including mechanical equipment that would be perceptible at sensitive receptors. Therefore, operational activity would result in a less-than-significant impact related to vibration.

Mitigation Measures

Refer to Mitigation Measure N7.

Significance After Mitigation

Mitigation Measure **N7** requires that the childcare facility close during pile driving activity. This would prevent children from being exposed to excessive vibration levels. Therefore, with mitigation, the proposed project would result in a less-than-significant impact related to construction vibration.

3.5.3 Would the proposed project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? *(Less-than-Significant Impact)*

Impact Analysis

As discussed in Section 3.5.1, above, the proposed project would not generate new traffic or include a significant source of mechanical equipment noise. In addition, new surface parking lots would not audibly increase noise levels at any sensitive receptor. Therefore, the proposed project would result in a less-than-significant impact related to operational noise.

Mitigation Measures

No impacts have been identified related to permanent noise levels, and no mitigation measures are required.

3.5.4 Would the proposed project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Less-than-Significant Impact with Mitigation)

Impact Analysis

As discussed in Section 3.5.1, sensitive receptors around the construction zone would experience increased noise levels associated with construction. Construction noise impacts would be temporary in nature, but equipment noise levels would exceed the 5 dBA significance threshold at the multi-family residence to the south and southwest. Therefore, without mitigation, the proposed project would result in a significant noise impact related to temporary and periodic construction activity.

Mitigation Measures

Refer to Mitigation Measures N1 through N9, above.

Significance After Mitigation

Based on compliance with the LAMC, construction equipment noise would be mitigated to the greatest extent feasible. The implementation of Mitigation Measures **N1** through **N9** would reduce noise impacts to less-than-significant.

3.5.5 Would the proposed project expose people working or residing in the project area to excessive noise associated with an airport land use plan or within two miles of a public airport? (*No Impact*)

Impact Analysis

The project site is not located within an airport land use plan. The nearest airport to the project site is the Santa Monica Municipal Airport, located approximately five miles to the west. Due to the distance from the nearest airport, the proposed project would not expose people working or residing in the project area to excessive noise. Therefore, no impact would occur.

Mitigation Measures

No impacts have been identified related to permanent noise levels, and no mitigation measures are required.

3.5.6 Would the proposed project expose people working or residing in the project area to excessive noise associated with a private airstrip? (*No Impact*)

Impact Analysis

The project site is not located near a private airstrip. Therefore, no noise impacts to people working or residing in the project area would occur.

Mitigation Measures

No impacts have been identified related to private airport noise levels, and no mitigation measures are required.
3.6 CUMULATIVE IMPACTS

All related projects would be 0.25 miles or further from the proposed project. Noise generated by the proposed project would not be audible at related project sites. Similarly, vibration generated by the proposed project would not be perceptible at related project sites. There is no potential for the project and related projects to combine to increase noise or vibration levels. The proposed project would not generate new vehicle trips to and from the site, or significant change permanent noise or vibration levels in the project area. Therefore, the proposed project would not contribute to a cumulative noise or vibration impact.

3.7 NEPA ANALYSIS

HUD noise standards are related to the construction of a new noise-sensitive land use or the rehabilitation of an existing noise-sensitive land use. The proposed project would not include a noise-sensitive land use. Potential adverse noise effects have been based on local standards. FTA standards have been used to determine potential adverse effects for vibration. In addition, HUD guidelines encourage the use of quieter construction equipment and methods in population centers. The same methodology was used to determine the CEQA level of significance. As discussed above, Mitigation Measures **N1** through **N7** would ensure that the proposed project would not result in adverse noise or vibration effects.

4.0 **REFERENCES**

California Department of Transportation, Technical Noise Supplement, November 2009.

Federal Highway Administration, Roadway Noise Construction Model, Software Version 1.1.

- Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.
- Los Angeles Municipal Code, Section 112.05 (*Maximum Noise Level of Powered Equipment or Powered Hand Tools*), adopted through June 30, 2015.
- Los Angeles Municipal Code, Section 41.40 (*Noise Due to Construction, Excavation Work When Prohibited*), adopted through June 30, 2015.
- United States Department of Housing and Urban Development, 24 CFR B Noise Abatement and Control, April 1, 2013
- United States Department of Housing and Urban Development, *HUD Noise Guidebook,* March 2009.
- United States Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.

APPENDIX A

Noise Data and Calculations

Vibration Annoyance Analysis

		Vibration Level at	Vibration Level at
Receptor	Distance (feet)	Receptor Phase 1 (VdB)	Receptor Phase 2 (VdB)
Multi-Family Residences to the South	300	72	55
Multi-Family Residences to the Southwest	450	66	49
Dorsey High School Track	500	65	48
Dorsey High School Nearest Classroom	800	59	42

Equation: $Lv(D) = Lv(25 \text{ ft}) - 30\log(D/25)$ D = Distance (feet) Lv(D) = Vibration Level

Equipment Reference VdB		
Large Bulldozer	87	
Loaded Trucks	86	
Pile Driver (Impact)	104	
Small Bulldozer	58	

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

Vibration Damage Analysis

Receptor	Distance (feet)	Vibration Level Phase 1 (Inches Per Second)	Vibration Level Phase 2 (Inches Per Second)
Multi-Family Residences to the South	300	0.0155	0.0018
Multi-Family Residences to the Southwest	450	0.0084	0.0010
Dorsey High School Track	500	0.0072	0.0008
Dorsey High School Nearest Classroom	800	0.0036	0.0004

Equation: PPVequip = PPVref x (25/D)^1.5

PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance

PPV (ref) is the reference vibration level in in/sec at 25 feet (Table 12-2) **D** is the distance from the equipment to the receiver.

Equipment Reference PPV	
Large Bulldozer	0.089
Loaded Trucks	0.076
Pile Driver (Impact)	0.644
Small Bulldozer	0.003

Source: Federal Transit Administration, Noise and Vibration Model, 2006

Summation of Noise Levels

Equation: Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Ns = Noise Level Sum N1 = Noise Level 1 N2 = Noise Level 2 N3 = Noise Level 3 N4 = Noise Level 4

Source: California Department of Transportation, Technical Noise Supplement, 2009

Equation: Ni = No - 20(log Di/Do) Ni = attenuated noise level of interest No = reference noise level **Noise Distance Attenuation Di** = distance to receptor (Di>Do) **Do** = reference distance

Source: (Bolt, Beranek, and Newman, 1971)

Noise Monitoring Report

Operator	Kieran Bartholow
Meter Model	Soundpro DL
Calibration Model	QC-10
	Ranch Cienega
Project	Sports Complex
Location	
	3515 South La Brea
	Avenue
Date	10/1/2015
Start Time	1110
Stop Time	1125
15 min Leq (dBA)	72
File Session #	124
Other Noise	
Sources	
Notes	
-	
Operator	Kieran Bartholow

oring Keport	
Operator	Kieran Bartholow
Meter Model	Soundpro DL
Calibration Model	QC-10
	Ranch Cienega
Project	Sports Complex
Location	Rancho Cienega
	Sports Complex,
	Child Care Center
Date	10/1/2015
Start Time	1133
Stop Time	1148
15 min Leq (dBA)	57.4
File Session #	125
Other Noise	
Sources	
Notes	

Operator	Kieran Bartholow
Meter Model	Soundpro DL
Calibration Model	QC-10
	Ranch Cienega
Project	Sports Complex
Location	Corner of Farmdale
	Avenue and Rodeo
	Road
Date	10/1/2015
Start Time	1200
Stop Time	1215
15 min Leq (dBA)	66.8
File Session #	126
Other Noise	
Sources	
Notes	

114 114.1

Noise Monitoring Report

Initial Calibration Final Calibration

TAHA

APPENDIX F Traffic Study

Traffic Study for the Rancho Cienega Sports Complex

Los Angeles, California

February 10, 2016

Prepared for:

AECOM 515 South Flower Street

Los Angeles, California 90017 (213) 593-8730

Prepared by:



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I. Introduction

This report documents the traffic analysis prepared by KOA Corporation to assess the traffic impact of the proposed upgrade of the Rancho Cienega Sports Complex, located in the Crenshaw / Baldwin Hills neighborhood of the City of Los Angeles.

I.I Project Description and Location

The Rancho Cienega Sports Complex is a thirty (30) acre regional park that is located within the City of Los Angeles Council District Number 10. The need for a new sports complex was prompted by several operational needs. The park programs have outgrown the aging gym and pool facilities. Both aforementioned facilities also have an aging infrastructure that has developed into a maintenance concern. Additionally the pool no longer fits the standards for competition pools. A need for a fitness annex and multipurpose room has been made evident by the community's use of the childcare facility to accommodate those functions.

The proposed project is located at 5001 Rodeo Road, directly south of the Metro Expo Line light rail transit system, and is directly west of Dorsey High School. Construction of the project is expected to take approximately 2.5 years and would be accomplished in two phases.

The traffic study was conducted by KOA to satisfy the requirements of project environmental documentation by the Los Angeles Bureau of Engineering (BOE). The analysis focused on project construction-related effects on study intersections and trip generation for site-based construction of necessary facilities. Additional focus of the traffic study effort was on the effects on potential impacts to transit access and pedestrian/bicycle access.

This analysis assumes that any trip generation increases in the post construction period, as a result of new site facilities, would not require the analysis of project operations traffic impacts, as would be no significant net increase in facility capacity.

Figure I provides the proposed project site plan. Figure 2 illustrates the project study area and intersections.

I.2 Project Construction Summary

Truck traffic and construction employee traffic at the Rancho Cienega Sports Complex has been included in this analysis. Project construction would commence in the fourth quarter of 2016 and is expected to last for 2.5 years, ending in early 2019. Construction would be conducted in two phases.





KOA CORPORATION

1.3 Traffic Analysis Methodology

The focus of this traffic impact study is on the construction period of the proposed Project. The postconstruction operations period will not generate significant levels of additional daily traffic. Selected intersections were analyzed along the construction routes and sites. Intersections were examined for potential significant impacts due to construction-related traffic.

The steps involved in the analysis included internal scoping of the work with the project team; collection of baseline traffic data; analysis of existing, existing-with-construction, and future with-construction conditions; identification of significant impacts and other circulation issues; and development of recommendations for mitigation. Further details of the methodology applied to this effort are summarized below.

Study Area and Orientation

Major signalized intersections near the project sites and along the project routes were identified that would potentially be impacted by construction trip generation from the Project site.

Data Collection

Weekday turn movement counts (7:00 a.m. to 10:00 a.m. and 3:00 p.m. to 6:00 p.m.) were conducted at seven signalized study intersections. Study intersection traffic volumes were collected on Thursday, October 1, 2015.

In addition, peak hour ingress/egress volumes were collected at the existing Exposition Boulevard driveway on the north side of the Project site. These volumes were acquired in order to estimate level of usage at the north parking lot, and for input into analysis regarding driveway access changes as part of construction.

The traffic counts for the intersection of Crenshaw Boulevard and Rodeo Road were collected in December 2014. They were not collected during October 2015, due to all-day road closures for construction activities related to the Crenshaw Light-Rail Line project. The 2014 counts were increased by a 1% growth factor to reflect ambient growth.

Definition of Analysis Periods

The study analysis periods were based on existing conditions (the time when the traffic counts were conducted), and the peak and latest year of construction of the proposed Project (defining the future analysis year with the highest background traffic volumes). The future analysis period was defined as the year 2019, based on construction details.

1.4 Level of Service Methodology

Table I provides descriptions of general roadway operations for each LOS value, as defined within the 2000 *Highway Capacity Manual* (published by the Transportation Research Board).

All signalized intersection volume-to-capacity (V/C) calculations, which define the LOS values, were adjusted downward based on the presence within the corridor of the ATSAC/ATCS signal synchronization and adaptive control system of the City of Los Angeles. The Department of Transportation (LADOT) allows for a factor to be applied that acknowledges the traffic flow benefits of the system. The table data incorporates this factor, and the appendix worksheets provide the non-factored calculations.

		Volume to
Level of		Capacity
Service	Flow Conditions	Ratio
A	LOS A describes primarily free-flow operations at average travel speeds, usually	0.00.0.(0
	about 90 percent of the free-flow speed for the arterial classification. Vehicles	0.00-0.60
	are completely unimpeded in their ability to maneuver within the traffic stream.	
	Stopped delay at signalized intersections is minimal.	
В	LOS B represents reasonably unimpeded operations at average travel speeds,	0 (1 0 70
	usually about 70 percent of the free-flow speed for the arterial classification.	0.61-0.70
	The ability to maneuver within the traffic stream is only slightly restricted and	
	stopped delays are not bothersome. Drivers are not generally subjected to	
	appreciable tension.	
C	LOS C represents stable operations; however, ability to maneuver and change	071090
	lanes in mid-block locations may be more restricted than at LOS B, and longer	0.71-0.60
	queues, adverse signal coordination, or both may contribute to lower average	
	speeds of about 50 percent of the average free-flow speed for the arterial	
	classification. Motorists will experience appreciable tension while driving.	
D	LOS D borders on a range in which small increases in flow may cause a	0 9 1 0 90
	substantial increase in delay and hence decreases in arterial speed. LOS D may	0.01-0.70
	be due to adverse signal progression, inappropriate signal timing, high volumes,	
	or some combination of these factors. Average travel speeds are about 40	
	percent of free-flow speed.	
E	LOS E is characterized by significant delays and average travel speeds of one-	0.91-1.00
	third the free-flow speed of less. Such operations are caused by some	0.71-1.00
	combination of adverse progression, high signal density, high volumes, extensive	
	delays at critical intersections, and inappropriate signal timing.	
F	LOS F characterizes arterial flow at extremely low speeds below one-third to	Over I 00
	one-fourth of the free-flow speed. Intersection congestion is likely at critical	
	signalized locations, with high delays and extensive queuing. Adverse	
	progression is frequently a contributor to this condition.	

Table I – Level of Service Definitions

Section 2 of this report provides a review of existing LOS values at the study intersections. Section 4 provides a review of existing plus-Project construction conditions, and Section 5 provides a review of pre-Project (pre-construction and pre-operations) conditions. Future with-Project construction period conditions are reviewed within Section 6.



1.5 Traffic Signal Synchronization

Automated Traffic Surveillance and Control (ATSAC) is a computer-based traffic signal control system whereby engineers monitor traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions. Sensors in the street detect the passage of vehicles, vehicle speed, and the level of congestion. This information is received on a second-by-second (real-time) basis and is analyzed on a minute-by-minute basis at the ATSAC Operations Center to determine if better traffic flow can be achieved by changing the signal timing. If required, the signal timing is either automatically changed by the ATSAC computers or manually changed by the operator using communication lines that connect the ATSAC Center with each traffic signal. To supplement the information from electronic detectors, closed-circuit television (CCTV) surveillance equipment has been and continues to be installed at critical locations throughout the City.

For capacity analysis, LADOT policies provide for a 0.07 reduction in volume-to-capacity ratio with the implementation of ATSAC and an additional 0.03 reduction in volume-to-capacity ratio with the implementation of ATCS, for a total reduction in volume-to-capacity ratio of 0.10. This reduction represents field measured benefits in flow and capacity increase by operation of this program.

All of the analyzed study intersections are operated with ATSAC and ATCS.

I.6 Significant Traffic Impacts

As defined by the LADOT traffic study guidelines, significant impacts of a proposed project on a facility must be mitigated to a level of insignificance, where feasible. Potential significant traffic impacts at the study intersections due to the proposed Project are discussed in Section 7 of this report.

2. Existing Area Traffic Conditions

This report section describes the characteristics of the intersections and roadways within the study area. A review of the collected traffic volumes is provided, along with a level of service analysis for these facilities.

2.1 Study Intersections

For the traffic impact analysis, seven locations were defined as study intersections. Existing intersection traffic volumes were collected on Thursday, October 1, 2015. December 2014 counts for intersection #7 were factored up by one percent to reflect ambient growth. The following are the seven signalized study intersections:

- I. La Brea Avenue & I-10 WB Off-Ramp
- 2. La Brea Avenue & I-10 EB Off-Ramp
- 3. La Brea Avenue & Jefferson Boulevard
- 4. La Brea Avenue & Rodeo Road
- 5. Martin Luther King, Jr Boulevard & Rodeo Road
- 6. Farmdale Avenue & Rodeo Road
- 7. Crenshaw Boulevard & Rodeo Road

2.2 Local Roadway Characteristics

Fieldwork within the Project study area was undertaken to identify traffic control and approach lane configurations at each study intersection, and to identify the roadway characteristics that included the number of travel lanes, on-street parking availability, and the locations of transit stops. The discussion presented here is limited to specific roadways that traverse the study intersections and provide access to the Project site.

Table 2 summarizes the characteristics of key roadway segments along the project corridor of construction.

Figure 3 illustrates the study intersection approach lanes and control configurations. The intersection traffic count summaries are provided in Appendix A of this report.

		# L	anes		Parking R	Posted			
Roadway	Classification	NB/ EB	SB/ WB	Median Type	North Side / East Side	South Side / West Side	Speed Limit (mph)	General Land Use	
La Brea Avenue	Modified Avenue I	3	3	CTL	NS 7AM - 9AM, 4PM - 7PM, M-F, I HR 9AM - 4PM	7AM - 9AM, 4PM - 7PM, M-F, I HR 9AM - 4PM I HR 9AM - 4PM		Commercial/Residential	
Farmdale Avenue	Collector Street	I	I	SТ	NL; 2 HR 8AM - 6PM NL; 2 HR 8AM - 6PM		25	Residential	
Crenshaw Boulevard	Modified Avenue I	2	2	DY	NSAT	NSAT	35	Commercial	
Exposition Boulevard	Modified Collector	Т	- I	DY	No Limit	NSAT	35	Industrial	
Jefferson Boulevard	Avenue II	2	2	DY	No Limit	NP 10PM - 6AM	35	Commercial	
Rodeo Road	Modified Avenue I	2	2	NS	No Limit	NSAT 35		Residential	
Martin Luther King Jr, Boulevard	Modified Avenue I	2	3	CTL	NSAT	NS 7-9AM, 4-7PM, M-F	40	Residential/Commercial	

Table 2 – Roadway Characteristics

DY - Double Yellow RM - Raised Median ST - Striped NSAT - No Stopping Any Time NS - No Striping CTL - Center Turn Lane



2.3 Existing Area Transit Service

The project study area is served by public transit bus lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro). Table 3 provides a description of the transit lines that serve the Project corridors.

Agency	Line	From	То	Via	Peak Frequency	
Metro	Expo Line	Downtown Los Angeles	Downtown Los Angeles Culver City		12 Minutes	
Metro	212/312	Hollywood	Hawthorne/Lennox Green Line Station	La Brea Avenue	10-12 Minutes	
Metro	105	West Hollywood	West Hollywood Vernon Rodeo Road / MLK Boulevard		10 - 16 Minutes	
Metro	38	Washington/Fairfax	Downtown Los Angeles	Jefferson Boulevard	12 - 24 Minutes	
Metro	210	Redondo Beach	Hollywood	Crenshaw Boulevard	10 - 20 Minutes	
Metro	705	West Hollywood	Vernon	Rodeo Road / MLK Boulevard	10 - 20 Minutes	
Metro	710	Redondo Beach	Hollywood	Crenshaw Boulevard	10 - 20 Minutes	
Metro	740	West Adams	Redondo Beach	Crenshaw Boulevard / La Brea Avenue	15 Minutes	
LADOT	Crenshaw DASH	Neighborhood C	Circulator Shuttle	La Brea Avenue / Crenshaw Boulevard / Coliseum Street / Santa Rosalia Drive	20 Minutes	

Table	3 -	Transit	Service	Summary
Iabic		I I ansit	JUIVICE	Juilliary

2.4 Existing Intersection Levels of Service

This report section documents existing weekday a.m. and p.m. peak-hour traffic conditions within the study area. Based on the traffic counts conducted at the study intersections, a level of service (LOS) value and a corresponding volume-to-capacity (v/c) ratio was determined for each study intersection.

Table 4 provides the V/C and LOS values under existing conditions, for the a.m. and p.m. peak hours.

	Study Intersections	AM P	eak	PM Peak		
	Study intersections	V/C	LOS	V/C	LOS	
I	La Brea Avenue & I-10 WB Off-Ramp	0.349	А	0.509	А	
2	La Brea Avenue & I-10 EB Off-Ramp	0.401	А	0.301	А	
3	La Brea Avenue & Jefferson Boulevard	0.949	Ε	0.970	Е	
4	La Brea Avenue & Rodeo Road	1.118	F	0.947	Е	
5	Martin Luther King, Jr. Boulevard & Rodeo Road	0.431	А	0.441	А	
6	Farmdale Avenue & Rodeo Road	0.462	А	0.481	А	
7	Crenshaw Boulevard & Rodeo Road	0.523	A	0.479	A	

Table 4 – Intersection Level of Service Calculations – Existing Conditions

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

The data in Table 4 indicates that five of the seven intersections are currently operating at LOS D or better during the a.m. and p.m. peak hours. The following intersections are operating at LOS E (poor operating conditions, nearing capacity) or LOS F (at / over capacity):

- <u>La Brea Avenue / Jefferson Boulevard</u> Operating at LOS E in the a.m. and p.m. peak hours.
- <u>La Brea Avenue / Rodeo Road</u> Operating at LOS F in the a.m. and LOS E in the p.m. peak hour.

The existing peak-hour turn movement volumes at the study intersections are provided on Figure 4 (a.m. peak) and Figure 4 (p.m. peak).

The intersection CMA level of service worksheets for the existing conditions scenario are provided in Appendix B of this report.





3. Construction Period Trip Generation

This section provides definitions for truck and employee vehicle trip generation during the peak period of Project construction, along with the distribution and assignment of those trips to the study area roadway network. To evaluate a worst-case scenario for construction trip generation of the proposed Project, it is assumed that each employee will drive to and from the work areas, with 50% arriving and departing during peak periods.

This is a planning-level analysis of construction activity, used for the purposes of determining traffic impacts during the project construction period. Prior to initiating construction, a detailed construction plan will be developed by the construction manager to identify necessary resources and to define the construction supervisory and technical field organization and staffing levels required for the project. The methods and procedures for sequencing and implementing construction operations will also be detailed in the construction plan.

Therefore, basic construction details defined for the project planning process have been used to analyze potential construction-period impacts.

4.1 Project Trip Generation Methodology

Project trip generation calculations included construction employee vehicle trips and construction truck trip estimates. The trip generation totals were determined based on the most intense period of construction activity for the project.

In converting trucks to passenger car equivalents, a Passenger Car Equivalent (PCE) factor of 2.5 was assumed. This factoring was used to increase truck volumes due to the additional roadway space and design capacity utilized by larger and slower trucks. The applied value matches typical factors used in area studies that include trips generated by trucking activities. The factor is based on conservative factors defined by the Southern California Association of Governments (SCAG) Heavy Duty Truck Model.

During the peak period of construction, project construction efforts would require approximately 45 total daily workers and 4 daily truck trips.

4.2 Project Trip Generation Calculations

In calculating peak-hour trips for the project, it is assumed that a majority of the construction employees will arrive and depart the construction work areas by personal vehicles. The morning arrival by employees is assumed to overlap the a.m. peak hour by 50 percent, with the remaining 50 percent of employees assumed to be at the sites before 7:00 a.m. The same would occur during the p.m. peak hour, with 50 percent of employees assumed to depart the site before 4:00 p.m. Therefore, the same reduction was taken for both peak periods.

During project construction activity, daily truck haul activities will occur over an eight-hour period that begins during the a.m. peak period, and is complete during the p.m. peak period.



The main haul route for trucks delivering construction equipment and materials to the Project site would travel from I-10, south on La Brea Avenue and east on Rodeo Road to the Project site. Alternatively, trucks carrying demolition debris from the Project site would travel from the Project site, west on Rodeo Road, and north on La Brea Avenue to I-10.

As indicated in Table 5, the Proposed Project construction would generate a daily total of 110 passenger car equivalent trips, with 27 (25 inbound and 2 outbound) trips occurring during the a.m. peak hour and 27 (2 inbound and 25 outbound) trips occurring during the p.m. peak hour.

TDID				AM PEAK HOUR						PM PEAK HOUR					
GENERATION	DAILY TRIPS		Tr	ruck Employee			Truck		Employee						
SOURCE				Tri	ps*	Tr	ips	ps Total Trip		Trips*		Trips		Total Trip	
	Trucks*	Employee	Total	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Field Personnel	0	45	90	0	0	23	0	23	0	0	0	0	23	0	23
Trucks	20	0	20	2	2	0	0	2	2	2	2	0	0	2	2
Grand Total Trips	20	45	110	2	2	23	0	25	2	2	2	0	23	2	25

Table 5 – Project Trip Generation

* Truck trips include a Passenger Car Equivalency (PCE) factor of 2.5.

Source: Los Angeles Bureau of Engineering: 4 daily trucks and 45 field personel during most intensive phase of construction/demolition. Assuming 8 hour work day.

4.3 Construction Project Trip Distribution/Assignment

The distribution of construction truck trips was assumed to be primarily freeway-oriented.

The distribution pattern for analyzed employee trips assumed that employees would arrive to construction sites using primarily major surface streets and freeways. Construction truck trip distribution is shown in Figure 6A and construction worker trip distribution is shown in Figure 6B. Trip assignment is shown in Figure 7 (a.m. peak hour) and Figure 8 (p.m. peak hour).









4. Existing Plus-Project Construction Conditions

An additional existing plus-Project construction scenario was included in the analysis, to comply with rulings on existing conditions baseline analysis from the *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* and *Neighbors for Smart Rail v. Exposition Metro Rail Construction Authority* California Environmental Quality Act (CEQA) court cases. This additional analysis scenario provides information about project impacts under the current baseline conditions.

The study intersection operations for the existing and existing plus-Project construction scenarios are summarized in Table 6.

	Study Intersections	AM P	eak	PM Peak		
	Study intersections	V/C	LOS	V/C	LOS	
Ι	La Brea Avenue & I-10 WB Off-Ramp	0.351	Α	0.510	Α	
2	La Brea Avenue & I-10 EB Off-Ramp	0.401	Α	0.303	Α	
3	La Brea Avenue & Jefferson Boulevard	0.954	Е	0.971	E	
4	La Brea Avenue & Rodeo Road	1.120	F	0.949	E	
5	Martin Luther King, Jr. Boulevard & Rodeo Road	0.437	Α	0.442	Α	
6	Farmdale Avenue & Rodeo Road	0.468	Α	0.485	Α	
7	Crenshaw Boulevard & Rodeo Road	0.525	Α	0.483	Α	

Table 6 – Study Intersection Conditions – Existing plus-Project Conditions

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

The data in Table 6 indicates that five of the seven study intersections are currently operating at LOS D or better during the a.m. and p.m. peak hours. The following intersections are operating at LOS E (poor operating conditions, nearing capacity) or LOS F (at / over capacity):

- La Brea Avenue / Jefferson Boulevard Operating at LOS E in the a.m. and p.m. peak hours.
- <u>La Brea Avenue / Rodeo Road</u> Operating at LOS F in the a.m. and LOS E in the p.m. peak hour.

The construction period analyzed traffic volumes for the existing plus-Project scenario at the study intersections and roadways are provided on Figure 9 (a.m. peak) and Figure 10 (p.m. peak).

Significant impact determinations are provided in Section 7 of this report.

The intersection CMA level of service calculation worksheets for this analysis scenario are provided in Appendix B.





5. Future without-Project Construction Conditions

This section provides an analysis of Future "without-Project" construction conditions in the study area with ambient growth and area project trips. The without-Project construction analysis was defined and analyzed through an application of an annual ambient growth rate to the existing traffic volumes, plus addition of volumes generated by area projects.

5.1 Ambient Growth

In order to forecast baseline traffic volumes for the analysis year of 2019, analyzed year-2015 peak-hour existing volumes from the existing conditions scenario were increased by a compounded annual ambient growth rate of one percent.

The application of this annual growth rate is consistent with sub-regional traffic growth data defined by the County of Los Angeles Congestion Management Program (CMP) document.

5.2 Area Projects

A 1.5-mile radius from the Project corridor was used to define a capture area for area approved and pending (cumulative) projects. The list of area projects was compiled based on information provided by LADOT Development Review staff.

The projects included in the list would potentially contribute measurable traffic volumes to the study area during the future analysis period. The LADOT project database provides total peak-hour trips, compiled from environmental documentation or traffic studies. The in/out trip generation ratios applied to the area projects were based on rates within *Trip Generation*, published by the Institute of Transportation Engineers.

The eight (8) area projects included in this study for the future period analysis, and the trip generation of each, are provided in Table 7. Figure 11 illustrates the location of the area projects. Figures 12 and 13 illustrate the total a.m. and p.m. trips generated by the area projects at the study intersections.

Мар					Daily	AM Peak Hour			PM Peak Hour		
ID	Location	Land Use	Jse Intensity		Total	Total	In	Out	Total	In	Out
I.	3060 S. Crenshaw Boulevard	Mixed Use	-	-	880	47	36	11	84	34	50
2	3650 Crenshaw Boulevard	Shopping Center	298.800	k.s.f.	4,750	102	62	40	446	214	232
3	3900 W. Martin Luther King, Jr. Boulevard	Mixed Use	-	-	4,008	473	368	105	446	271	175
4	3900 W. Martin Luther King, Jr. Boulevard	Medical Office	105.000	k.s.f.	2,846	188	148	40	228	63	165
5	3650 W. Martin Luther King, Jr. Boulevard	Mixed Use	-	-	13,512	875	447	428	1,333	665	668
6	4018 S. Buckingham Road	Senior Apartments	130	d.u.	447	26	10	16	33	18	15
7	3221 S. La Cienega Boulevard	Mixed Use	-	-	10,136	737	319	418	849	467	382
8	3831 W. Stocker Street	Apartments	127.000	d.u.	710	52	4	48	69	50	19
	Total	37,289	2,500	1,394	1,106	3,488	1,782	1,706			

 Table 7 – Area/Cumulative Projects Trip Generation

d.u. = dwelling units, k.s.f. = 1,000 square feet of floor area

Source: Los Angeles Department of Transportation (LADOT) Case Logging and Tracking System (CLATS), 2015; City of Los Angeles Engineering, City of Los Angeles Public Works.






5.3 Future Intersection Levels of Service

To analyze future conditions in the year 2019 without the proposed Project construction traffic, intersection turn volumes with ambient growth were analyzed using the same methodology applied to the existing conditions analysis.

Table 8 provides the a.m. and p.m. peak-hour results of this analysis for the study intersections.

	Study Intersections	AM P	eak	PM Peak		
	Study intersections	V/C	LOS	V/C	LOS	
Ι	La Brea Avenue & I-10 WB Off-Ramp	0.379	А	0.548	Α	
2	La Brea Avenue & I-10 EB Off-Ramp	0.468	Α	0.387	Α	
3	La Brea Avenue & Jefferson Boulevard	1.050	F	1.088	F	
4	La Brea Avenue & Rodeo Road	1.288	F	1.137	F	
5	Martin Luther King, Jr. Boulevard & Rodeo Road	0.493	А	0.531	Α	
6	Farmdale Avenue & Rodeo Road	0.485	Α	0.504	Α	
7	Crenshaw Boulevard & Rodeo Road	0.691	В	0.770	С	

Table 8 – Level of Service Calculations – FutureWithout-Project Construction Conditions

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

Under this scenario, all intersections would continue to operate at LOS D or better during the weekday a.m. and p.m. peak hours, except for the following:

- <u>La Brea Avenue / Jefferson Boulevard</u> Operating at LOS F in the a.m. and p.m. peak hours.
- <u>La Brea Avenue / Rodeo Road</u> Operating at LOS F in the a.m. and p.m. peak hours.

The study intersection analysis CMA worksheets for this scenario are provided in Appendix B of this report. The analyzed peak-hour traffic volumes at the study intersections and roadways for this scenario are provided on Figure 14 (a.m. peak) and Figure 15 (pm. peak).





6. Future Project Construction-Period Conditions

This section documents future traffic conditions at the study intersections with the addition of Projectconstruction generated traffic. Traffic volumes for these conditions were derived by adding the net Project construction trips to the future without-Project volumes.

The future 2019 with-Project construction traffic volumes are illustrated on Figure 16 (a.m. peak hour) and Figure 17 (p.m. peak hour). The LADOT Critical Movement Analysis (CMA) calculation worksheets are provided in Appendix B of this report.

Table 9 summarizes the resulting V/C and LOS values at the study intersections.

	Study Interactions	AM P	eak	PM Peak	
	Study intersections	V/C	LOS	V/C	LOS
	La Brea Avenue & I-10 WB Off-Ramp	0.381	А	0.549	Α
2	La Brea Avenue & I-10 EB Off-Ramp	0.469	Α	0.389	Α
3	La Brea Avenue & Jefferson Boulevard	1.050	F	1.089	F
4	La Brea Avenue & Rodeo Road	1.290	F	1.139	F
5	Martin Luther King, Jr. Boulevard & Rodeo Road	0.496	А	0.531	Α
6	Farmdale Avenue & Rodeo Road	0.491	Α	0.508	Α
7	Crenshaw Boulevard & Rodeo Road	0.692	В	0.773	С

Table 9 – Study Intersection Conditions –Future With Project Construction Conditions

LOS = Level of Service; V/C = Volume-to-Capacity Ratio

The data in Table 9 indicates that five of the seven study intersections are projected to operate at LOS D or better during the a.m. and p.m. peak hours. The following intersections are operating at LOS E (poor operating conditions, nearing capacity) or LOS F (at / overcapacity):

- La Brea Avenue / Jefferson Boulevard Operating at LOS E in the a.m. and p.m. peak hours.
- <u>La Brea Avenue / Rodeo Road</u> Operating at LOS F in the a.m. and LOS E in the p.m. peak hour.

Significant impact determinations are provided in Section 7 of this report.





7. Project Construction Impacts

7.1 Significant Impact Guidelines

Traffic impacts are identified if a proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below an acceptable level of service and project related traffic will worsen conditions within the specified threshold range.

The City of Los Angeles Department of Transportation has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered significant impacts:

Level of Service	Final V/C*	Project Related v/c increase		
С	< 0.70 – 0.80	Equal to or greater than 0.040		
D	< 0.80 - 0.90	Equal to or greater than 0.020		
E and F	0.90 or more	Equal to or greater than 0.010		

Note: Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient growth, trips from area/cumulative projects, but without proposed traffic impact mitigations.

7.2 Project Traffic Impacts – Existing with Project Construction Conditions

A summary of the existing and existing with-Project construction traffic V/C and LOS values is provided by Table 10. Traffic impacts created by the proposed Project are determined by comparing the existing conditions to the existing with-Project construction traffic conditions.



Study Intersections		Existing (2015) Conditions Peak		Existing (2015) + Project Construction		Change	Sig	
		Hour	V/C or Delay	LOS	V/C or Delay	LOS		mpace
1	La Brea Avenue & I-10 WB Off-Ramp	AM	0.349	Α	0.351	Α	0.002	No
		PM	0.509	А	0.510	Α	0.001	No
2	La Brea Avenue & I-10 EB Off-Ramp	AM	0.401	А	0.401	А	0.000	No
		PM	0.301	Α	0.303	А	0.002	No
3	La Brea Avenue & Jefferson Boulevard	AM	0.949	E	0.954	Е	0.005	No
		PM	0.970	Е	0.971	Е	0.001	No
4	La Brea Avenue & Rodeo Road	AM	1.118	F	1.120	F	0.002	No
		PM	0.947	E	0.949	Е	0.002	No
5	Martin Luther King, Jr. Boulevard & Rodeo Road	AM	0.431	Α	0.437	А	0.006	No
		PM	0.441	А	0.442	А	0.001	No
6	Farmdale Avenue & Rodeo Road	AM	0.462	А	0.468	А	0.006	No
		PM	0.481	Α	0.485	Α	0.004	No
7	Crenshaw Boulevard & Rodeo Road	AM	0.523	Α	0.525	А	0.002	No
		PM	0.479	Α	0.483	А	0.004	No

Table 10 – Study Intersection Impacts Existing plus-Project Construction Conditions

LOS = Level of Service, V/C = Volume-to-Capacity Ratio

The proposed Project construction is not anticipated to create significant traffic impacts at any of the study intersections under the analyzed existing plus-Project construction traffic conditions scenario.

7.3 Project Traffic Impacts – Future With Project Construction Conditions

Table 11 provides a summary of the future 2019 with-Project construction V/C and LOS values. Traffic impacts created by the Project are determined by comparing the future without-Project conditions to the future with-Project construction conditions.



Study Intersections			Future (2019) No Project		Future (2019) With Project Construction		Change in V/C	Sig
		Peak Hour	V/C or Delay	LOS	V/C or Delay	LOS		
Т	La Brea Avenue & I-10 WB Off-Ramp	AM	0.379	Α	0.381	Α	0.002	No
		PM	0.548	Α	0.549	Α	0.001	No
2	La Brea Avenue & I-10 EB Off-Ramp	AM	0.468	Α	0.469	Α	0.001	No
		PM	0.387	Α	0.389	Α	0.002	No
3	La Brea Avenue & Jefferson Boulevard	AM	1.050	F	1.050	F	0.000	No
		PM	1.088	F	1.089	F	0.001	No
4	La Brea Avenue & Rodeo Road	AM	1.288	F	1.290	F	0.002	No
		PM	1.137	F	1.139	F	0.002	No
5	Martin Luther King, Jr. Boulevard & Rodeo Road	AM	0.493	Α	0.496	Α	0.003	No
		PM	0.531	Α	0.531	Α	0.000	No
6	Farmdale Avenue & Rodeo Road	AM	0.485	Α	0.491	Α	0.006	No
		PM	0.504	Α	0.508	A	0.004	No
7	Crenshaw Boulevard & Rodeo Road	AM	0.691	В	0.692	В	0.001	No
		PM	0.770	С	0.773	С	0.003	No

Table 11 – Study Intersection Impacts Future With Project Construction Conditions

LOS = Level of Service, V/C = Volume-to-Capacity Ratio

The proposed Project construction is not anticipated to create significant traffic impacts at any of the study intersections under the analyzed Future with Project construction traffic conditions scenario.

7.4 Project Pedestrian Access

The nearby signalized intersections of Martin Luther King, Jr. Boulevard / Rodeo Road and La Brea Avenue / Rodeo Road, along with an existing mid-block crosswalk located to the east of the Project site on Rodeo Road, provide protected pedestrian crossings that allow for safe pedestrian movements and will remain accessible during and after construction.

Furthermore, the existing sidewalk fronting the Project site along Rodeo Road and any bus stops will remain accessible during and after construction in order to ensure safe pedestrian travel and convenient transit access. Overall, an existing sidewalk network and traffic signals at major intersections provide an adequate local pedestrian travel network for the proposed Project.

8. West Driveway Traffic Analysis

This section analyzes the traffic impact that would be experienced by the proposed new right-in/rightout driveway at the south side of the Project site, near the west property line. The new driveway will provide access from Rodeo Road to new parking facilities located on the west side of the upgraded park complex.

The additional parking and new driveway would be used approximately 20-25 times a year for sports and community programs.

In order to prepare this analysis, a.m. and p.m. peak hour driveway counts were taken on Thursday, October 1, 2015 at the existing north driveway that provides access to Exposition Boulevard, near the Expo Line right-of-way.

The volumes from this driveway were analyzed without reduction, to conservatively represent a shift of all north parking area vehicle volumes to the new south driveway. It is not expected that the new driveway would operate with the intensity of the volumes analyzed here. The new southern driveway would be one of two driveways providing access to the parking area, the other being the existing north driveway on Exposition Boulevard. Special event traffic was not analyzed for this exercise, as such events do not represent typical conditions and the access driveways should provide adequate capacity for day-to-day operations of the park.

The City of Los Angeles does not provide traffic impact analysis methodology for unsignalized intersections. For this analysis of level of service (LOS) and queuing at the driveway, the Highway Capacity Manual (HCM) methodology was used. The HCM method takes into account vehicle volumes, pedestrian and bike movements, user defined saturation flow rates, and storage bay lengths. The resulting intersection delay (seconds) is then utilized for identification of a level of service value for that particular peak hour period. The output for this method is a delay (in seconds) value and a level of service for the intersection as a whole.

Table 12 shows the anticipated vehicle delay and 90th percentile queue at the new driveway.



Table 12 – West Driveway Traffic AnalysisExisting and Future With Project Conditions

AM Peak Hour							
Driveway Del	ay (sec.) / LOS	Max Driveway Queue (Vehicles) ¹					
Existing + Project	Future With Project	Existing + Project	Future With Project				
27 / D	32.1/D	0.2	0.3				
PM Peak Hour							
Driveway [Delay (sec.)	Max Driveway Q	ueue (Vehicles) ¹				
Driveway E Existing + Project	Delay (sec.) Future With Project	Max Driveway Q Existing + Project	ueue (Vehicles) ¹ Future With Project				

^{1.} Vehicle queues reflect those occuring at the driveway approach with the longest queue.

As Table 12 shows, under the existing + Project scenario, the driveway LOS is D or better and the delay is just under 30 seconds per vehicle during the AM and PM peak hour. The maximum driveway vehicle queue during both peak hours is under one vehicle max.

Under the Future with Project scenario, the driveway LOS is D or better and the delay is 32 seconds or less during both the AM and PM peak hours. The maximum driveway vehicle queue during both peak hours is under one vehicle max.

Although the driveway delay is approximately half a minute during the AM peak it is not anticipated that this would lead to a severe driveway traffic impact as the vehicle volumes and delay would not cause a long vehicle queue on-site. Special event volumes would cause higher delays, but those events would not represent typical traffic conditions, and the larger parking lot area on the west side of the site has access points on both the north and south sides of the site.

Furthermore, the driveway will only be used between 20 and 25 times a year, so it is not expected to cause a frequent traffic problem.

In the event that the driveway queue exceeds two vehicles during special events, the park operator may set up temporary traffic control to ease congestion and improve traffic flow.

9. Congestion Management Program (CMP) Analysis

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program. The CMP program is intended to analyze the cumulative impact of new development as it occurs, and allow for improvements to the roadway system as level of service values on monitored facilities are reduced to poor levels. The CMP guidelines are analyzed here in order to illustrate project compliance.

The Congestion Management Program (CMP) was created statewide because of Proposition III and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires the analysis of the traffic impacts of individual development projects with potentially regional significance. A specific system of arterial roadways plus all freeways comprises the CMP system. In conformance with CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted at:

- CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project would add 50 or more vehicle trips during either morning or afternoon weekday peak hours.
- CMP mainline freeway-monitoring locations, where the project would add 150 or more trips, in either direction, during the either the morning or afternoon weekday peak hours.

Truck trips within the totals below have been adjusted by a passenger-car equivalent (PCE) factor of 2.5, as explained within the analysis. Construction employee vehicle trips have also been included.

Impacts to CMP Arterials

The nearest CMP monitoring location to the project study corridor is La Cienega Boulevard and Jefferson Boulevard, which is located approximately 1.20 miles to the northwest of the project site. Based on the trip generation, distribution, and anticipated detour routes of the project, it is not expected that 50 or more construction project trips would be added to this nearby CMP intersection. Therefore, no further analysis of potential CMP impacts is required.

Impacts to CMP Freeways

The nearest CMP mainline freeway-monitoring location to the project site is on the I-10 freeway, to the east of La Brea Avenue. This location is located approximately 0.8-miles to the north of the project site. The proposed project is expected to add less than 150 new trips per hour, in either direction, to any freeway segment based on the project trip generation. Therefore, no further analysis of CMP freeway monitoring stations is required.

This section provides major conclusions of the Project traffic impact analysis and recommendations to alleviate localized but insignificant traffic impacts.

Major analysis assumptions and conclusions are as follows:

10.1 Proposed Project Assumptions and Conclusions

- Under existing analyzed conditions, five of the seven study intersections are operating at LOS D or better during the a.m. and p.m. peak hours.
- Construction of the project is scheduled to commence in 2016 and end in 2019. Typical construction hours would be Monday through Friday from 7:00 a.m. to 3:30 p.m.
- Project construction for the proposed Project would generate a daily total of 110 passenger car equivalent trips, with 27 (25 inbound and 2 outbound) trips occurring during the a.m. peak hour and 27 (2 inbound and 25 outbound) trips occurring during the p.m. peak hour.
- Under the existing plus-Project construction analysis, two of the seven study intersections will operate at LOS E or F.
- Under the future with-Project construction analysis, two of the seven study intersections will operate at LOS E or F.
- No significant traffic impacts will occur due to Project construction.
- The proposed West Driveway is not expected to experience high levels of delay for outbound vehicles. The queues, are not anticipated to surpass one vehicle.
- In the event that the driveway queue exceeds two vehicles, it is recommended that the park operator set up temporary traffic control to ease congestion and improve traffic flow. This may be necessary during special events and championship sports events.
- The Project will not generate any new measurable and regular vehicle trips during the operations period, and long-term mitigation measures are therefore not required.



APPENDIX A Existing Traffic Count Data



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	La Brea Ave									
East/West	I-10 WB Off	Ramp								
Day:	Thursday	Da	ite: O	ctober 1, 20	15	Weather:		SUNNY		
Hours: 7-10 &	2 3-6			Chek	rs:	NDS				
School Day:	YES	Di	strict:			I/S CO	DE			
DUAL- WHEELED BIKES BUSES	<u>N/B</u> 0 0 0		<u>S/B</u> 0 0 0			<u>E/B</u> 0 0 0		_	W/B 0 0 0	
	N/B	TIME	S/B	TIME		E/B	TIME		W/B	TIME
AM PK 15 MIN	570	7.15	599	7.15		73	9.45		99	9.30
PM PK 15 MIN	451	15.45	547	16.15		176	16.00		175	16.45
AM PK HOUR	2158	7.15	2232	7.15		243	9.00		326	9.00
PM PK HOUR	1687	15.30	2060	17.00		670	16.00		652	16.15

NORTHBOUND Approach

EASTBOUND Approach

Lt

0

0

0

0

0

0

0

Hours

7-8

8-9

9-10

15-16

16-17

17-18

TOTAL

Hours	Lt	Th	Rt	Total
7-8	0	1771	374	2145
8-9	0	1632	336	1968
9-10	0	1653	261	1914
15-16	0	1307	339	1646
16-17	0	1311	267	1578
17-18	0	1419	211	1630
TOTAL	0	9093	1788	10881

Th

0

0

0 0 0

0

0

Rt Total

96

115

243

518

670

555

2197

96

115

243

518

670

555

2197

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1530	642	2172
8-9	0	1546	552	2098
9-10	0	1351	453	1804
15-16	0	1384	392	1776
16-17	0	1635	299	1934
17-18	0	1700	360	2060
TOTAL	0	9146	2698	11844

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	255	255
8-9	0	0	301	301
9-10	0	0	326	326
15-16	0	0	483	483
16-17	0	0	633	633
17-18	0	0	544	544
TOTAL	0	0	2542	2542

TOTAL XING S/L

TOTAL

E-W

351

416

569

1001

1303

1099

4739

XING N/L

N-S	Ped	Sch		Ped
4317	0	0		0
4066	0	0		0
3718	0	0		0
3422	0	0		0
3512	0	0		0
3690	0	0		0
22725	0	0	[0

XING W/L

XING E/L

Sch

0

Ped	Sch	Ped	Sch
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

ITM Peak Hour Summary

La Brea Ave and I-10 WB Off Ramp , Baldwin Hills







Total Volume Per Leg



Project ID:	15-5630-00	1		TOTALS							Day: Thursday			
City:	Baldwin Hill	s				101/	ALS			Date: 10/1/2015				
NS/EW Streets:	L	a Brea Ave		La Brea Ave I-10 WB Off Ramp					I-10	WB Off Ra	ımp			
	N	ORTHBOUN	ID	SOUTHBOUND EASTBOUN			D WESTBOUND			D				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	4	1	0	3	0	0	0	1	0	0	2		
7:00 AM	0	398	102	0	338	160	0	0	28	0	0	68	1094	
7:15 AM	0	462	108	0	403	196	0	0	18	0	0	53	1240	
7:30 AM	0	481	71	0	406	165	0	0	22	0	0	62	1207	
7:45 AM	0	430	93	0	383	121	0	0	28	0	0	72	1127	
8:00 AM	0	418	95	0	404	154	0	0	26	0	0	70	1167	
8:15 AM	0	395	87	0	389	154	0	0	24	0	0	82	1131	
8:30 AM	0	438	68	0	424	135	0	0	30	0	0	83	1178	
8:45 AM	0	381	86	0	329	109	0	0	35	0	0	66	1006	
9:00 AM	0	451	91	0	340	156	0	0	37	0	0	51	1126	
9:15 AM	0	427	46	0	332	114	0	0	62	0	0	88	1069	
9:30 AM	0	383	54	0	337	103	0	0	71	0	0	99	1047	
9:45 AM	0	392	70	0	342	80	0	0	73	0	0	88	1045	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	0 0.00%	5056 83.89%	971 16.11%	0 0.00%	4427 72.88%	1647 27.12%	0 0.00%	0 0.00%	454 100.00%	0 0.00%	0 0.00%	882 100.00%	13437	
PEAK HR START TIME :	715 /	AM											TOTAL	
PEAK HR VOL :	0	1791	367	0	1596	636	0	0	94	0	0	257	4741	
PEAK HR FACTOR :		0.946			0.932			0.839			0.892		0.956	

Project ID: 1	15-5630-00	1		τοται s							Day: Thursday			
City: E	Baldwin Hill	s		PM							Date: 10/1/2015			
NS/EW Streets:	La	a Brea Ave		La Brea Ave I-10 WB Off Ramp					mp	I-10				
	N	ORTHBOUN	D	S	OUTHBOUN	ID	E	ASTBOUN	D	N	-			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	4	1	0	3	0	0	0	1	0	0	2		
3:00 PM	0	307	70	0	308	93	0	0	171	0	0	161	1110	
3:15 PM	0	289	81	0	354	90	0	0	61	0	0	41	916	
3:30 PM	0	352	96	0	356	112	0	0	144	0	0	142	1202	
3:45 PM	0	359	92	0	366	97	0	0	142	0	0	139	1195	
4:00 PM	0	301	68	0	378	67	0	0	176	0	0	149	1139	
4:15 PM	0	338	81	0	465	82	0	0	161	0	0	154	1281	
4:30 PM	0	341	53	0	388	70	0	0	174	0	0	155	1181	
4:45 PM	0	331	65	0	404	80	0	0	159	0	0	175	1214	
5:00 PM	0	353	56	0	409	105	0	0	147	0	0	168	1238	
5:15 PM	0	320	45	0	418	75	0	0	145	0	0	131	1134	
5:30 PM	0	379	66	0	452	83	0	0	124	0	0	113	1217	
5:45 PM	0	367	44	0	421	97	0	0	139	0	0	132	1200	
	NL	NT 4037	NR 817	SL	ST 4719	SR 1051	EL 0	ET 0	ER 1743	WL	WT	WR 1660	TOTAL	
APPROACH %'s :	0.00%	83.17%	16.83%	0.00%	81.79%	18.21%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	14027	
PEAK HR START TIME :	415 F	PM											TOTAL	
PEAK HR VOL :	0	1363	255	0	1666	337	0	0	641	0	0	652	4914	
PEAK HR FACTOR :		0.965			0.915			0.921			0.931		0.959	

Project ID:	15-5630-00)1	CADE								Day: Thursday			
City:	Baldwin Hill	s		AM							Date: 10/1/2015			
NS/EW Streets:	L	a Brea Ave		La Brea Ave I-10 WB Off Ramp				amp	I-10	WB Off Ra	imp			
	N	ORTHBOUN	ID	S	OUTHBOUN	ID	E	EASTBOUND		WESTBOUND				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	4	1	0	3	0	0	0	1	0	0	2		
7:00 AM	0	398	102	0	338	160	0	0	28	0	0	68	1094	
7:15 AM	0	462	108	0	403	196	0	0	18	0	0	53	1240	
7:30 AM	0	481	71	0	406	165	0	0	22	0	0	62	1207	
7:45 AM	0	430	93	0	383	121	0	0	28	0	0	72	1127	
8:00 AM	0	418	95	0	404	154	0	0	26	0	0	70	1167	
8:15 AM	0	395	87	0	389	154	0	0	24	0	0	82	1131	
8:30 AM	0	438	68	0	424	135	0	0	30	0	0	83	1178	
8:45 AM	0	381	86	0	329	109	0	0	35	0	0	66	1006	
9:00 AM	0	451	91	0	340	156	0	0	37	0	0	51	1126	
9:15 AM	0	427	46	0	332	114	0	0	62	0	0	88	1069	
9:30 AM	0	383	54	0	337	103	0	0	71	0	0	99	1047	
9:45 AM	0	392	70	0	342	80	0	0	73	0	0	88	1045	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	0 0.00%	5056 83.89%	971 16.11%	0 0.00%	4427 72.88%	1647 27.12%	0 0.00%	0 0.00%	454 100.00%	0 0.00%	0 0.00%	882 100.00%	13437	
PEAK HR START TIME :	715	AM	_										TOTAL	
PEAK HR VOL :	0	1791	367	0	1596	636	0	0	94	0	0	257	4741	
PEAK HR FACTOR :		0.946			0.932			0.839			0.892		0.956	

Project ID: 7	15-5630-00	1		Day: Thursday							Thursday		
City: 1	Baldwin Hill	s				CAI	RS Л						
NS/EW Streets:	L	a Brea Ave		La Brea Ave I-10 WB Off Ramp					mp	I-10			
	N	ORTHBOUN	ID	S	OUTHBOUN	ID	E	ASTBOUN	D	V			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	1	0	3	0	0	0	1	0	0	2	
3:00 PM	0	307	70	0	308	93	0	0	171	0	0	161	1110
3:15 PM	0	289	81	0	354	90	0	0	61	0	0	41	916
3:30 PM	0	352	96	0	356	112	0	0	144	0	0	142	1202
3:45 PM	0	359	92	0	366	97	0	0	142	0	0	139	1195
4:00 PM	0	301	68	0	378	67	0	0	176	0	0	149	1139
4:15 PM	0	338	81	0	465	82	0	0	161	0	0	154	1281
4:30 PM	0	341	53	0	388	70	0	0	174	0	0	155	1181
4:45 PM	0	331	65	0	404	80	0	0	159	0	0	175	1214
5:00 PM	0	353	56	0	409	105	0	0	147	0	0	168	1238
5:15 PM	0	320	45	0	418	75	0	0	145	0	0	131	1134
5:30 PM	0	379	66	0	452	83	0	0	124	0	0	113	1217
5:45 PM	0	367	44	0	421	97	0	0	139	0	0	132	1200
TOTAL VOLUMES : APPROACH %'s :	NL 0 0.00%	NT 4037 83.17%	NR 817 16.83%	SL 0 0.00%	ST 4719 81.79%	SR 1051 18.21%	EL 0 0.00%	ET 0 0.00%	ER 1743 100.00%	WL 0 0.00%	WT 0 0.00%	WR 1660 100.00%	TOTAL 14027
PEAK HR START TIME :	415	PM											TOTAL
PEAK HR VOL :	0	1363	255	0	1666	337	0	0	641	0	0	652	4914
PEAK HR FACTOR :		0.965			0.915			0.921			0.931		0.959



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	La Brea Ave									
East/West	I-10 EB Off	Ramp								
Day:	Thursday	Da	ate: O	ctober 1, 2	015	Weather:		SUNNY		
Hours: 7-10 &	3-6			Che	ekrs:	NDS				
School Day:	YES	Di	istrict:			I/S CO	DE			
DUAL- WHEELED BIKES BUSES	<u>N/B</u> 0 0 0		<u>S/B</u> 0 0 0			E/B 0 0 0		_	W/B 0 0 0	
	N/B	TIME	S/B	TIME		E/B	TIME	_	W/B	TIME
AM PK 15 MIN	643	7.15	456	8.30		62	7.30		129	9.15
PM PK 15 MIN	587	15.45	629	16.15		80	15.15		84	15.30
AM PK HOUR	2422	7.00	1696	7.45		222	7.30		422	9.00
PM PK HOUR	2070	15.30	2305	16.00		271	15.00		244	15.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1864	558	2422
8-9	0	1697	402	2099
9-10	0	1497	524	2021
15-16	0	1404	593	1997
16-17	0	1379	608	1987
17-18	0	1405	537	1942
	-			
TOTAL	0	9246	3222	12468

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1223	396	1619
8-9	0	1359	297	1656
9-10	0	1223	366	1589
15-16	0	1492	412	1904
16-17	0	1820	485	2305
17-18	0	1823	422	2245
	-			
TOTAL	0	8940	2378	11318

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	285	285
8-9	0	0	271	271
9-10	0	0	422	422
15-16	0	0	244	244
16-17	0	0	198	198
17-18	0	0	233	233
TOTAL	0	0	1653	1653

TOTAL XING S/L

TOTAL

E-W

481

484

602

515

409

493

2984

XING N/L

N-S	Ped	Sch	Ped
4041	0	0	0
3755	0	0	0
3610	0	0	0
3901	0	0	0
4292	0	0	0
4187	0	0	0
23786	0	0	0

XING W/L

Ped

0

0

0

0

0

0

0

XING E/L

Sch

0

0

0

Sch	Ped	Sch
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	196	196
8-9	0	0	213	213
9-10	0	0	180	180
15-16	0	0	271	271
16-17	0	0	211	211
17-18	0	0	260	260
TOTAL	0	0	1331	1331

ITM Peak Hour Summary Prepared by: NDS

La Brea Ave and I-10 EB Off Ramp , Baldwin Hills







Total Volume Per Leg



	Project ID: 1	15-5630-00	2				тот	Day: Thursday						
	City: E	Baldwin Hill	S				101	ALS				Date:	10/1/2015	
	NS/EW Streets:	L	a Brea Ave		L	a Brea Ave	A	I-10 EB Off Ramp		mp	I-10 EB Off Ramp			
1		N	ORTHBOUN	ID	S	OUTHBOUN	ID	EASTBOUND			WESTBOUND			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	3	0	0	4	1	0	0	2	0	0	1	
•	7:00 AM	0	426	184	0	242	129	0	0	26	0	0	72	1079
	7:15 AM	0	502	141	0	309	102	0	0	48	0	0	73	1175
	7:30 AM	0	478	116	0	347	86	0	0	62	0	0	70	1159
	7:45 AM	0	458	117	0	325	79	0	0	60	0	0	70	1109
	8:00 AM	0	449	120	0	358	76	0	0	51	0	0	57	1111
	8:15 AM	0	422	95	0	341	61	0	0	49	0	0	63	1031
	8:30 AM	0	417	107	0	369	87	0	0	51	0	0	86	1117
	8:45 AM	0	409	80	0	291	73	0	0	62	0	0	65	980
	9:00 AM	0	437	112	0	301	69	0	0	48	0	0	99	1066
	9:15 AM	0	350	127	0	309	92	0	0	51	0	0	129	1058
	9:30 AM	0	323	112	0	317	83	0	0	35	0	0	108	978
	9:45 AM	0	387	173	0	296	122	0	0	46	0	0	86	1110
•		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	TOTAL VOLUMES : APPROACH %'s :	0 0.00%	5058 77.32%	1484 22.68%	0 0.00%	3805 78.23%	1059 21.77%	0 0.00%	0 0.00%	589 100.00%	0 0.00%	0 0.00%	978 100.00%	12973
	PEAK HR START TIME :	715 /	MA											TOTAL
	PEAK HR VOL :	0	1887	494	0	1339	343	0	0	221	0	0	270	4554
	PEAK HR FACTOR :		0.926			0.969			0.891			0.925		0.969

Project ID: 1									Day:	Thursday			
City: B	aldwin Hill	s				тот	ALS				Date	10/1/2015	
				PM							Dute.	10, 1, 2010	
NS/EW Streets:	La	a Brea Ave		La Brea Ave I-10 EB Off Ram			mp I-10 EB Off Ramp						
I	N	ORTHBOUN	D	S	OUTHBOUN	D	E	ASTBOUN	D	W	/ESTBOUN	D	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	0	4	1	0	0	2	0	0	1	
3:00 PM	0	322	148	0	357	101	0	0	59	0	0	53	1040
3:15 PM	0	324	137	0	324	111	0	0	80	0	0	50	1026
3:30 PM	0	359	120	0	382	92	0	0	64	0	0	84	1101
3:45 PM	0	399	188	0	429	108	0	0	68	0	0	57	1249
4:00 PM	0	319	163	0	430	120	0	0	50	0	0	44	1126
4:15 PM	0	382	140	0	484	145	0	0	54	0	0	38	1243
4:30 PM	0	328	148	0	423	96	0	0	55	0	0	63	1113
4:45 PM	0	350	157	0	483	124	0	0	52	0	0	53	1219
5:00 PM	0	327	148	0	424	113	0	0	60	0	0	68	1140
5:15 PM	0	334	137	0	480	95	0	0	62	0	0	45	1153
5:30 PM	0	384	121	0	443	107	0	0	59	0	0	51	1165
5:45 PM	0	360	131	0	476	107	0	0	79	0	0	69	1222
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	4188	1738	0	5135	1319	0	0	742	0	0	675	13797
APPROACH %'s :	0.00%	70.67%	29.33%	0.00%	79.56%	20.44%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	_
PEAK HR START TIME :	345 F	PM											TOTAL
PEAK HR VOL :	0	1428	639	0	1766	469	0	0	227	0	0	202	4731
PEAK HR FACTOR :		0.880			0.888			0.835			0.802		0.947

	Project ID: 1				C 41	26				Day:	Thursday					
	City: E	Baldwin Hill	S				CAI	15				Date: 10/1/2015				
	NS/EW Streets:	L	a Brea Ave		La Brea Ave			vi I-10	EB Off Ra	mp	I-10 EB Off Ramp					
-		N	ORTHBOUN	ID	S	OUTHBOUN	ID	E	ASTBOUN	D	V	/ESTBOUN	D			
	LANES:	NL O	NT 3	NR 0	SL 0	ST 4	SR 1	EL O	ET 0	ER 2	WL 0	WT 0	WR 1	TOTAL		
-	7:00 AM	0	426	184	0	242	129	0	0	26	0	0	72	1079		
	7:15 AM	0	502	141	0	309	102	0	0	48	0	0	73	1175		
	7:30 AM	0	478	116	0	347	86	0	0	62	0	0	70	1159		
	7:45 AM	0	458	117	0	325	79	0	0	60	0	0	70	1109		
	8:00 AM	0	449	120	0	358	76	0	0	51	0	0	57	1111		
	8:15 AM	0	422	95	0	341	61	0	0	49	0	0	63	1031		
	8:30 AM	0	417	107	0	369	87	0	0	51	0	0	86	1117		
	8:45 AM	0	409	80	0	291	73	0	0	62	0	0	65	980		
	9:00 AM	0	437	112	0	301	69	0	0	48	0	0	99	1066		
	9:15 AM	0	350	127	0	309	92	0	0	51	0	0	129	1058		
	9:30 AM	0	323	112	0	317	83	0	0	35	0	0	108	978		
	9:45 AM	0	387	173	0	296	122	0	0	46	0	0	86	1110		
-	TOTAL VOLUMES : APPROACH %'s :	NL 0 0.00%	NT 5058 77.32%	NR 1484 22.68%	SL 0 0.00%	ST 3805 78.23%	SR 1059 21.77%	EL 0 0.00%	ET 0 0.00%	ER 589 100.00%	WL 0 0.00%	WT 0 0.00%	WR 978 100.00%	TOTAL 12973		
	PEAK HR START TIME :	715 /	AM											TOTAL		
	PEAK HR VOL :	0	1887	494	0	1339	343	0	0	221	0	0	270	4554		
	PEAK HR FACTOR :		0.926			0.969			0.891			0.925		0.969		

Project ID: 1									Day:	Thursday				
City: E	Baldwin Hill	s		PM							Date:	10/1/2015		
NS/EW Streets:	La	La Brea Ave			La Brea Ave			I-10 EB Off Ramp			I-10 EB Off Ramp			
	N	ORTHBOUN	ID	S	OUTHBOUN	D	E	ASTBOUN	D	V	/ESTBOUN	D		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	3	0	0	4	1	0	0	2	0	0	1		
3:00 PM	0	322	148	0	357	101	0	0	59	0	0	53	1040	
3:15 PM	0	324	137	0	324	111	0	0	80	0	0	50	1026	
3:30 PM	0	359	120	0	382	92	0	0	64	0	0	84	1101	
3:45 PM	0	399	188	0	429	108	0	0	68	0	0	57	1249	
4:00 PM	0	319	163	0	430	120	0	0	50	0	0	44	1126	
4:15 PM	0	382	140	0	484	145	0	0	54	0	0	38	1243	
4:30 PM	0	328	148	0	423	96	0	0	55	0	0	63	1113	
4:45 PM	0	350	157	0	483	124	0	0	52	0	0	53	1219	
5:00 PM	0	327	148	0	424	113	0	0	60	0	0	68	1140	
5:15 PM	0	334	137	0	480	95	0	0	62	0	0	45	1153	
5:30 PM	0	384	121	0	443	107	0	0	59	0	0	51	1165	
5:45 PM	0	360	131	0	476	107	0	0	79	0	0	69	1222	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES :	0	4188	1738	0	5135	1319	0	0	742	0	0	675	13797	
APPROACH %'s :	0.00%	70.67%	29.33%	0.00%	79.56%	20.44%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%		
PEAK HR START TIME :	345 F	PM											TOTAL	
PEAK HR VOL :	0	1428	639	0	1766	469	0	0	227	0	0	202	4731	
PEAK HR FACTOR :		0.880			0.888			0.835			0.802		0.947	



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

La Brea Ave										
Jefferson Blvd										
Thursday	Date:	0	ctober 1, 2015	Weather:	2	SUNNY				
3-6			Chekrs:	NDS						
YES	Distric	t:		I/S CO	DE _					
N/B 236 34 52		<u>S/B</u> 166 36 44		<u>E/B</u> 113 46 21		W/B 105 62 43				
N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME			
717	7.15	394	8.45	219	7.30	461	8.00			
576	16.15	451	17.45	281	17.00	274	17.30			
2627	7.00	1447	8.00	777	7.30	1668	7.45			
2242	15.30	1727	17.00	1065	15.30	1006	16.45			
	La Brea Ave Jefferson Blv Thursday 3-6 YES N/B 236 34 52 N/B 717 576 2627 2242	La Brea Ave Jefferson Blvd Thursday Date: 3-6 Distric YES Distric N/B 236 34 52 N/B TIME 717 7.15 576 16.15 2627 7.00 2242 15.30	La Brea Ave Jefferson Blvd Thursday Date: Outstand 3-6 District:	La Brea Ave Jefferson Blvd Thursday Date: October 1, 2015 3-6 Chekrs: YES District: N/B S/B 236 166 34 36 52 44 N/B TIME S/B 717 7.15 394 8.45 576 16.15 451 17.45 2627 7.00 1447 8.00 2242 15.30 1727 17.00	La Brea Ave Jefferson Blvd Thursday Date: October 1, 2015 Weather: 3-6 Chekrs: NDS YES District: VS CO N/B S/B E/B 236 166 113 34 36 46 52 44 21 N/B TIME S/B TIME 717 7.15 394 8.45 219 576 16.15 451 17.45 281 2627 7.00 1447 8.00 777 2242 15.30 1727 17.00 1065	La Brea Ave Jefferson Blvd Thursday Date: October 1, 2015 Weather: S 3-6 Chekrs: NDS NDS NDS NDS NDS YES District: I/S CODE I/S CODE I/S E/B $IIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$	La Brea Ave Jefferson Blvd Thursday Date: October 1, 2015 Weather: SUNNY 3-6 Chekrs: NDS NP NP VES District: VS CODE VB N/B S/B S/B E/B W/B MB N/B S/B E/B W/B 236 166 113 105 62 144 62 21 43 N/B TIME S/B TIME E/B TIME W/B 717 7.15 394 8.45 219 7.30 461 576 16.15 451 17.45 281 17.00 274 2627 7.00 1447 8.00 777 7.30 1668 2242 15.30 1727 17.00 1065 15.30 1006			

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	354	2142	131	2627
8-9	279	1933	108	2320
9-10	273	1891	149	2313
15-16	207	1697	268	2172
16-17	203	1708	283	2194
17-18	179	1737	241	2157
	-			
TOTAL	1495	11108	1180	13783

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	41	1165	143	1349
8-9	36	1302	109	1447
9-10	39	1182	140	1361
15-16	48	1427	87	1562
16-17	28	1582	50	1660
17-18	42	1644	41	1727
TOTAL	234	8302	570	9106

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	316	1116	52	1484
8-9	466	1092	73	1631
9-10	464	1023	58	1545
15-16	384	472	62	918
16-17	452	465	70	987
17-18	437	516	51	1004
TOTAL	2519	4684	366	7569

TOTAL XING S/L

TOTAL

E-W

2145

2395

2175

1950 2034

2058

12757

XING N/L

N-S	Ped	Sch	Ped	Sch
3976	59	3	36	3
3767	59	3	36	2
3674	60	5	33	3
3734	70	5	71	8
3854	71	6	70	7
3884	52	4	30	1
22889	371	26	276	24

XING W/L

XING E/L

Ped	Sch	-	Ped	Sch
91	39		54	11
97	14		46	11
94	17		44	11
133	21		68	10
155	17		90	15
111	17		62	18
681	125		364	76

Hours	Lt	Th	Rt	Total
7-8	64	329	268	661
8-9	61	393	310	764
9-10	66	298	266	630
15-16	78	572	382	1032
16-17	60	575	412	1047
17-18	51	585	418	1054
TOTAL	380	2752	2056	5188

ITM Peak Hour Summary Prepared by: NDS

La Brea Ave and Jefferson Blvd , Baldwin Hills







Total Volume Per Leg



Project ID:	15-5630-00	3	Day: Thurs									「hursday		
City:	Baldwin Hill	s		AM							Date: 10/1/2015			
NS/EW Streets:	L	La Brea Ave			La Brea Ave Jefferson Blvd				k	Jefferson Blvd				
	N	ORTHBOUN	D	S	OUTHBOUN	D	E	EASTBOUNI)	V	VESTBOUND)		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
7:00 AM	91	525	26	5	259	32	13	50	53	47	309	9	1419	
7:15 AM	100	586	31	5	296	44	14	67	52	75	237	11	1518	
7:30 AM	87	495	38	15	284	36	20	118	81	89	294	21	1578	
7:45 AM	76	536	36	16	326	31	17	94	82	105	276	11	1606	
8:00 AM	70	474	29	10	283	28	10	115	72	128	312	21	1552	
8:15 AM	80	537	23	6	341	24	15	88	65	91	272	15	1557	
8:30 AM	70	435	25	10	325	26	16	98	71	137	280	20	1513	
8:45 AM	59	487	31	10	353	31	20	92	102	110	228	17	1540	
9:00 AM	71	476	32	9	273	26	12	81	74	128	288	17	1487	
9:15 AM	74	502	34	14	303	44	23	68	67	103	210	13	1455	
9:30 AM	68	440	32	5	286	34	17	86	70	123	294	18	1473	
9:45 AM	60	473	51	11	320	36	14	63	55	110	231	10	1434	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	906 12.48%	5966 82.18%	388 5.34%	116 2.79%	3649 87.78%	392 9.43%	191 9.29%	1020 49.64%	844 41.07%	1246 26.74%	3231 69.33%	183 3.93%	18132	
PEAK HR START TIME :	730 /	AM											TOTAL	
PEAK HR VOL :	313	2042	126	47	1234	119	62	415	300	413	1154	68	6293	
PEAK HR FACTOR :		0.957			0.938			0.887			0.887		0.980	

Project ID: City:	Project ID: 15-5630-003 City: Baldwin Hills					TOTALS PM							
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave		Je	fferson Blvo	k	Je	fferson Blvd		
I	N	ORTHBOUN	D	S	OUTHBOUN	D	E	EASTBOUND)	V	VESTBOUND)	
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
3:00 PM 3:15 PM 3:30 PM	41 66 48	396 443 429	57 59 75	9 9 18	318 384 350	20 16 23	23 23 14	131 138 161	90 96 95	92 90 107	126 105 133	26 11 17	1329 1440 1470
3:45 PM 4:00 PM 4:15 PM	52 53 61	429 421 438	77 82 77	12 14 3	375 371 418	28 17 12	18 23 10	142 148 147	101 105 101	95 109 104	108 117 115	8 19 13	1445 1479 1499
4:30 PM 4:45 PM 5:00 PM	40 49 44	398 451 422	60 64 72	8 3 11	370 423 424	11 10 11	11 16 17	140 140 160	105 101 104	124 115 119	131 102 128	16 22 12	1414 1496 1524
5:15 PM 5:30 PM 5:45 PM	34 46 55	427 432 456	57 53 59	10 11 10	388 399 433	14 8 8	11 9 14	131 152 142	81 118 115	96 117 105	129 140 119	9 17 13	1387 1502 1529
TOTAL VOLUMES: APPROACH %'s:	NL 589 9.03%	NT 5142 78.83%	NR 792 12.14%	SL 118 2.38%	ST 4653 94.02%	SR 178 3.60%	EL 189 6.03%	ET 1732 55.28%	ER 1212 38.68%	WL 1273 43.76%	WT 1453 49.95%	WR 183 6.29%	TOTAL 17514
PEAK HR START TIME : PEAK HR VOL :	500 F	PM 1737	241	42	1644	41	51	585	418	437	516	51	TOTAL 5942
PEAK HR FACTOR :		0.946			0.957			0.938			0.916		0.972

Project ID:	15-5630-00	3	Day: Thursda									hursday		
City:	Baldwin Hill	S					(S			Date: 10/1/2015				
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave		Je	fferson Blvo	ł	Je	fferson Blvd	l		
	N	ORTHBOUN	1D	S	OUTHBOUN	D	E	EASTBOUND			VESTBOUND)		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
7:00 AM	88	511	26	5	254	31	12	48	50	47	308	9	1389	
7:15 AM	99	577	31	5	287	41	8	64	51	72	229	11	1475	
7:30 AM	86	481	35	14	279	35	20	116	80	84	288	21	1539	
7:45 AM	74	529	35	15	319	31	16	90	80	102	271	10	1572	
8:00 AM	69	467	29	10	274	26	10	113	70	126	310	21	1525	
8:15 AM	78	531	23	6	336	22	15	87	62	91	270	15	1536	
8:30 AM	69	426	25	10	320	25	15	96	69	134	276	19	1484	
8:45 AM	57	481	29	10	344	31	18	88	99	108	222	15	1502	
9:00 AM	68	466	32	9	267	24	12	80	73	124	281	16	1452	
9:15 AM	74	488	32	14	295	42	23	64	65	98	207	13	1415	
9:30 AM	67	426	32	4	278	33	15	83	70	121	289	16	1434	
9:45 AM	60	459	50	11	310	36	12	56	55	108	224	9	1390	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	889 12.50%	5842 82.17%	379 5.33%	113 2.79%	3563 87.91%	377 9.30%	176 8.87%	985 49.62%	824 41.51%	1215 26.62%	3175 69.55%	175 3.83%	17713	
PEAK HR START TIME :	730 /	AM											TOTAL	
PEAK HR VOL :	307	2008	122	45	1208	114	61	406	292	403	1139	67	6172	
PEAK HR FACTOR :		0.955			0.936			0.878			0.880		0.982	

Project ID: 15-5630-003				CADE							Day: Thursday			
City:	Baldwin Hill	S				PN	1							
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave		Je	fferson Blvo	ł	Je	fferson Blvd			
	N	ORTHBOUN	D	S	OUTHBOUN	D	E	ASTBOUNE)	V	VESTBOUNE)		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
3:00 PM	41	388	57	9	314	20	20	126	87	89	123	25	1299	
3:15 PM	64	427	57	9	374	15	20	136	95	89	100	11	1397	
3:30 PM	46	420	75	17	341	20	14	157	95	107	132	16	1440	
3:45 PM	50	408	76	10	366	26	17	141	99	92	106	8	1399	
4:00 PM	53	412	82	13	361	13	22	143	104	106	115	19	1443	
4:15 PM	61	427	76	1	408	11	10	143	99	103	115	13	1467	
4:30 PM	40	393	59	8	362	11	11	137	103	122	129	16	1391	
4:45 PM	49	437	62	3	412	10	16	138	100	114	101	22	1464	
5:00 PM	44	419	69	9	421	11	17	156	104	114	127	12	1503	
5:15 PM	34	415	57	10	384	13	10	128	81	93	128	7	1360	
5:30 PM	46	426	50	11	397	8	8	150	116	113	139	17	1481	
5:45 PM	55	452	58	10	427	8	14	138	114	105	115	13	1509	
TOTAL VOLUMES : APPROACH %'s :	NL 583 9.13%	NT 5024 78.68%	NR 778 12.18%	SL 110 2.27%	ST 4567 94.30%	SR 166 3.43%	EL 179 5.83%	ET 1693 55.16%	ER 1197 39.00%	WL 1247 43.66%	WT 1430 50.07%	WR 179 6.27%	TOTAL 17153	
PEAK HR START TIME :	500 l	PM											TOTAL	
PEAK HR VOL :	179	1712	234	40	1629	40	49	572	415	425	509	49	5853	
PEAK HR FACTOR :		0.940			0.960			0.935			0.914		0.970	

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-5630-003 N/S Street: La Brea Ave E/W Street: Jefferson Blvd 10/1/2015 DATE: CITY: **Baldwin Hills** ΑM

Adult Pedestrians

ТІМЕ	NORT	H LEG	SOUTH LEG		EAST	T LEG	WEST LEG		
IINE	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	3	2	6	7	1	12	8	16	
7:15 AM	7	6	10	6	5	12	13	10	
7:30 AM	11	3	9	4	4	12	3	16	
7:45 AM	1	3	8	9	5	3	6	19	
8:00 AM	3	4	11	4	4	4	8	18	
8:15 AM	2	6	6	13	6	7	12	14	
8:30 AM	7	8	11	4	9	7	8	16	
8:45 AM	2	4	6	4	1	8	5	16	
9:00 AM	8	3	12	8	3	11	10	22	
9:15 AM	3	2	8	5	6	6	5	14	
9:30 AM	1	5	1	8	1	4	10	4	
9:45 AM	3	8	9	9	9	4	9	20	
TOTALS	51	54	97	81	54	90	97	185	

NORTH LEG SOUTH LEG EAST LEG WEST LEG ТІМЕ EB WB EB WB NB SB NB SB 7:00 AM 7:15 AM ':30 AM ':45 AM 3:00 AM 3:15 AM 3:30 AM 8:45 AM 9:00 AM 9:15 AM 9:30 AM 9:45 AM TOTALS

РМ

Adult Pedestrians

TIME	NORT	'H LEG	SOUT	H LEG	EAST	「 LEG	WES	T LEG
TIVIE	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	8	5	7	5	3	4	11	12
3:15 PM	6	12	9	9	19	6	32	9
3:30 PM	9	13	5	20	7	15	25	15
3:45 PM	8	10	6	9	8	6	11	18
4:00 PM	6	2	6	7	8	7	24	15
4:15 PM	2	10	16	12	13	4	22	22
4:30 PM	16	12	10	8	22	15	16	17
4:45 PM	11	11	5	7	13	8	19	20
5:00 PM	2	7	8	6	9	2	11	18
5:15 PM	2	5	12	8	15	5	19	11
5:30 PM	2	4	3	5	8	6	14	6
5:45 PM	5	3	3	7	8	9	17	15
TOTALS	77	94	90	103	133	87	221	178

School Agod Podostrians

JUIDOI-Ageu	NORT	HIFG	SOUT	HIFG	FAST	LEG	WEST	[FG
TIME	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	2	0	2	0	0	0	2	2
3:15 PM	1	2	1	0	3	0	2	3
3:30 PM	0	1	0	2	1	3	3	5
3:45 PM	1	1	0	0	2	1	1	3
4:00 PM	0	0	0	0	2	1	2	5
4:15 PM	0	1	2	1	3	0	2	2
4:30 PM	2	2	1	1	2	5	3	1
4:45 PM	1	1	1	0	1	1	1	1
5:00 PM	1	0	1	0	3	2	1	2
5:15 PM	0	0	2	0	5	2	2	1
5:30 PM	0	0	0	0	2	1	3	1
5:45 PM	0	0	0	1	2	1	4	3
TOTALS	8	8	10	5	26	17	26	29

Thursday DAY:

School-Aged Pedestrians

-	Г LEG	WEST	T LEG	EAST	H LEG	SOUT	G
	SB	NB	SB	NB	WB	EB	В
7	16	8	12	1	7	6	
7	10	13	12	5	6	10	
7	16	3	12	4	4	9	
7	19	6	3	5	9	8	
8	18	8	4	4	4	11	
8	14	12	7	6	13	6	
8	16	8	7	9	4	11	
-	41	-	0	4		,	

Project ID:	15-5630-00	3				DUK	Day: Thursday						
City:	Baldwin Hill	s				BIK	.ES				Date: 1	0/1/2015	
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave	A	N Je	fferson Blvd		Je	fferson Blvd		
	N	ORTHBOUN	D	S	OUTHBOUN	ID	E	ASTBOUND		V	VESTBOUND)	
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
7:00 AM	1	0	0	2	2	0	1	2	0	0	2	0	10
7:15 AM	0	0	0	2	0	1	0	0	1	0	5	0	7
7:30 AM	0	0	0	0	1	1	1	1	0	1	2	0	7
7:45 AM	1	0	0	õ	1	1	0	1	0	1	0	Ő	5
8:00 AM	0	2	0	0	0	0	0	1	0	0	5	0	8
8:15 AM	1	0	0	0	1	0	0	1	0	0	1	0	4
8:30 AM	0	1	0	0	2	0	0	1	0	0	4	0	8
8:45 AM	0	0	0	0	1	0	0	1	0	0	1	0	3
9:00 AM	1	0	0	0	2	0	0	4	0	0	8	0	15
9:15 AM	1	2	1	0	0	0	0	0	0	0	2	0	6
9:30 AM	0	1	0	0	1	0	0	0	0	0	2	0	4
9:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES : APPROACH %'s :	NL 5 38.46%	NT 7 53.85%	NR 1 7.69%	SL 3 17.65%	ST 11 64.71%	SR 3 17.65%	EL 2 13.33%	ET 12 80.00%	ER 1 6.67%	WL 2 5.88%	WT 32 94.12%	WR 0 0.00%	TOTAL 79
PEAK HR START TIME :	730 /	AM											TOTAL
PEAK HR VOL :	2	2	0	0	3	2	1	4	0	2	8	0	24
PEAK HR FACTOR :		0.500			0.625			0.625			0.500		0.750

Project ID: 15-5630-003				DIVES							Day: Thursday			
City:	Baldwin Hill	s				BIK	ES				Date: 1	0/1/2015		
						P	N							
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave		Je	fferson Blvd		Je	fferson Blvd	l		
	N	ORTHBOUN	D	S	DUTHBOUN	D	E	EASTBOUND	1	V	VESTBOUND)		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
3:00 PM	0	0	0	0	0	0	0	3	0	0	1	0	4	
3:15 PM	0	0	0	0	2	0	0	0	0	0	2	0	4	
3:30 PM	1	0	0	0	0	0	0	0	1	0	2	0	4	
3:45 PM	0	3	0	1	1	0	0	3	0	1	0	0	9	
4:00 PM	2	2	0	0	4	0	1	2	1	1	5	0	18	
4:15 PM	0	2	1	0	0	0	0	2	0	0	1	0	6	
4:30 PM	0	2	0	0	1	0	0	2	0	1	1	0	7	
4:45 PM	0	2	0	0	4	0	0	5	0	0	2	0	13	
5:00 PM	0	0	0	0	1	0	0	4	0	0	3	0	8	
5:15 PM	0	2	0	0	1	0	0	0	1	0	3	1	8	
5:30 PM	0	0	0	0	1	2	0	2	0	0	1	0	6	
5:45 PM	1	3	0	0	1	0	0	4	0	0	3	0	12	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	4 19.05%	16 76.19%	1 4.76%	1 5.26%	16 84.21%	2 10.53%	1 3.23%	27 87.10%	3 9.68%	3 10.71%	24 85.71%	1 3.57%	99	
PEAK HR START TIME :	500 l	PM											TOTAL	
PEAK HR VOL :	1	5	0	0	4	2	0	10	1	0	10	1	34	
PEAK HR FACTOR :		0.375			0.500			0.688			0.688		0.708	

Project ID: 1	15-5630-0	03				BUS	Day: Thursday							
City: E	Baldwin Hi	lls									Date: 1	0/1/2015		
NS/EW Streets:	I	La Brea Ave		l	a Brea Ave	A	Je	efferson Blvd	I	Je	fferson Blvd			
	Ν	IORTHBOUN	D	S	OUTHBOUN	D		EASTBOUND)	V	VESTBOUND)		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
7:00 AM	0	2	0	0	2	0	0	1	0	0	0	0	5	
7:15 AM	0	1	0	0	2	0	0	1	0	2	1	0	7	
7:30 AM	0	3	0	0	1	0	0	1	0	0	1	0	6	
7:45 AM	0	3	0	0	2	0	0	2	0	2	1	0	10	
8:00 AM	0	2	0	0	2	0	0	1	0	1	0	0	6	
8:15 AM	0	0	0	0	1	0	0	1	0	0	1	0	3	
8:30 AM	0	4	0	0	1	0	0	0	0	2	1	0	8	
8:45 AM	0	2	0	0	3	0	0	1	0	1	0	0	7	
9:00 AM	0	1	0	0	1	0	0	0	0	1	2	0	5	
9:15 AM	0	3	0	0	1	0	0	0	0	3	0	0	7	
9:30 AM	0	1	0	0	1	0	0	1	0	0	1	0	4	
9:45 AM	0	2	0	0	1	0	0	2	0	1	1	0	7	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES :	0	24	0	0	18	0	0	11	0	13	9	0	75	
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	59.09%	40.91%	0.00%		
PEAK HR START TIME :	730	AM											TOTAL	
PEAK HR VOL :	0	8	0	0	6	0	0	5	0	3	3	0	25	
PEAK HR FACTOR :		0.667			0.750			0.625			0.500		0.625	
Project ID: 1	Project ID: 15-5630-003					BUSES								
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City: E	Baldwin Hil	ls		РМ							Date: 10/1/2015			
NS/EW Streets:	L	a Brea Ave		La Brea Ave Jefferson Blvd				Je						
	Ν	ORTHBOUN	D	SOUTHBOUND			EASTBOUND			WESTBOUND				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
3:00 PM	0	2	0	0	2	0	0	1	0	1	1	0	7	
3:15 PM	0	2	0	0	2	0	0	1	0	0	1	0	6	
3:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	
3:45 PM	0	9	0	0	2	0	1	0	1	3	1	0	17	
4:00 PM	0	1	0	0	0	0	0	1	0	1	1	0	4	
4:15 PM	0	3	0	0	4	0	0	0	0	0	0	0	7	
4:30 PM	0	1	0	0	1	0	0	1	0	2	1	0	6	
4:45 PM	0	4	0	0	5	0	0	1	0	0	1	0	11	
5:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	
5:15 PM	0	4	0	0	4	0	0	1	0	2	1	0	12	
5:30 PM	0	0	0	0	1	0	0	1	0	1	1	0	4	
5:45 PM	0	2	0	0	4	0	0	0	0	0	1	0	7	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES :	0	28 100.00%	0	0	26 100.00%	0	1 10.00%	8 80.00%	1 10.00%	11 52 38%	10 47.62%	0 0.00%	85	
All KOACH 703	0.0070	100.0070	0.0070	0.0070	100.0070	0.0070	10.0070	00.0070	10.0070	52.5070	47.0270	0.0070	I	
PEAK HR START TIME :	500	PM											TOTAL	
PEAK HR VOL :	0	6	0	0	9	0	0	2	0	4	4	0	25	
PEAK HR FACTOR :		0.375			0.563			0.500			0.667		0.521	

Project ID:	15-5630-00	30-003 HEAVY TRUCKS								Day: Thursday				
City:	Baldwin Hill	s				A	И			Date: 10/1/2015				
NS/EW Streets:	La	a Brea Ave		La Brea Ave Jefferson Blvd			ł	Jefferson Blvd						
	N	ORTHBOUN	D	S	OUTHBOUN	ID	E	ASTBOUN)	V	VESTBOUN	D		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	1	3	0	1	3	0	1	2	1	1	2	0		
7:00 AM	3	12	0	0	3	1	1	1	3	0	1	0	25	
7:15 AM	1	8	0	0	7	3	6	2	1	1	7	0	36	
7:30 AM	1	11	3	1	4	1	0	1	1	5	5	0	33	
7:45 AM	2	4	1	1	5	0	1	2	2	1	4	1	24	
8:00 AM	1	5	0	0	7	2	0	1	2	1	2	0	21	
8:15 AM	2	6	0	0	4	2	0	0	3	0	1	0	18	
8:30 AM	1	5	0	0	4	1	1	2	2	1	3	1	21	
8:45 AM	2	4	2	0	6	0	2	3	3	1	6	2	31	
9:00 AM	3	9	0	0	5	2	0	1	1	3	5	1	30	
9:15 AM	0	11	2	0	7	2	0	4	2	2	3	0	33	
9:30 AM	1	13	0	1	7	1	2	2	0	2	4	2	35	
9:45 AM	0	12	1	0	9	0	2	5	0	1	6	1	37	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	17 13.49%	100 79.37%	9 7.14%	3 3.49%	68 79.07%	15 17.44%	15 25.42%	24 40.68%	20 33.90%	18 24.66%	47 64.38%	8 10.96%	344	
PEAK HR START TIME :	730 /	۹M											TOTAL	
PEAK HR VOL :	6	26	4	2	20	5	1	4	8	7	12	1	96	
PEAK HR FACTOR :		0.600			0.750			0.650			0.500		0.727	

Intersection Turning Movement

National Data & Surveying Services

Project ID: 1	Project ID: 15-5630-003 City: Baldwin Hills					HEAVY	Day: Thursday						
	Saluwin Hill	5				PI	N			Date: 10/1/2015			
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave	Jefferson Blvd			ł	Jefferson Blvd			
	N	ORTHBOUN	ID	S	OUTHBOUN	ID	I	EASTBOUNE)	V	VESTBOUN	2	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	1	1	2	0	
3:00 PM	0	6	0	0	2	0	3	4	3	2	2	1	23
3:15 PM	2	14	2	0	8	1	3	1	1	1	4	0	37
3:30 PM	2	9	0	1	8	3	0	3	0	0	1	1	28
3:45 PM	2	12	1	2	7	2	0	1	1	0	1	0	29
4:00 PM	0	8	0	1	10	4	1	4	1	2	1	0	32
4:15 PM	0	8	1	2	6	1	0	4	2	1	0	0	25
4:30 PM	0	4	1	0	7	0	0	2	2	0	1	0	17
4:45 PM	0	10	2	0	6	0	0	1	1	1	0	0	21
5:00 PM	0	3	3	2	3	0	0	4	0	4	0	0	19
5:15 PM	0	8	0	0	0	1	1	2	0	1	0	2	15
5:30 PM	0	6	3	0	1	0	1	1	2	3	0	0	17
5:45 PM	0	2	1	0	2	0	0	4	1	0	3	0	13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	90	14	8	60	12	9	31	14	15	13	4	276
APPROACH %'s :	5.45%	81.82%	12.73%	10.00%	75.00%	15.00%	16.67%	57.41%	25.93%	46.88%	40.63%	12.50%	
PEAK HR START TIME :	500	PM											TOTAL
	0	19	7	2	6	1	2	11	3	8	3	2	64
LAKTIK VOL .	Ŭ		,	-	Ŭ		-		Ũ		<u> </u>	2	04
PEAK HR FACTOR :		0.722			0.450			0.800			0.813		0.842



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	La Brea Ave	:								
East/West	Rodeo Rd									
Day:	Thursday	Da	ate: O	ctober 1, 2	015	Weather:		SUNNY		
Hours: 7-10 &	2 3-6			Che	ekrs:	NDS				
School Day:	YES	Di	strict:			I/S CO	DE			
DUAL- WHEELED BIKES BUSES	N/B 166 52 52		<u>S/B</u> 194 44 69			E/B 97 29 39		_	W/B 136 25 44	
	N/B	TIME	S/B	TIME		E/B	TIME		W/B	TIME
AM PK 15 MIN	549	7.45	569	8.45		203	8.00		559	7.15
PM PK 15 MIN	496	16.45	650	17.45		376	17.15		285	17.30
AM PK HOUR	2051	7.30	2062	8.00		743	7.45		1943	7.00
PM PK HOUR	1811	16.45	2415	16.15		1420	16.45		1060	15.00

NORTHBOUND Approach

EASTBOUND Approach

Lt

Hours	Lt	Th	Rt	Total
7-8	176	1847	13	2036
8-9	158	1771	37	1966
9-10	136	1727	48	1911
15-16	85	1571	75	1731
16-17	99	1633	77	1809
17-18	106	1634	67	1807
TOTAL	760	10183	317	11260

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	233	1283	243	1759
8-9	211	1488	363	2062
9-10	199	1459	229	1887
15-16	284	1677	165	2126
16-17	291	1881	197	2369
17-18	297	1912	198	2407
TOTAL	1515	9700	1395	12610

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	146	1310	487	1943
8-9	138	1026	340	1504
9-10	152	757	325	1234
15-16	150	546	364	1060
16-17	166	549	322	1037
17-18	197	536	325	1058
TOTAL	949	4724	2163	7836

TOTAL XING S/L

TOTAL

E-W

XING N/L

N-S	Ped	Sch	Ped	Sch
3795	50	12	69	26
4028	72	0	102	2
3798	77	0	106	0
3857	81	10	102	74
4178	82	0	122	1
4214	90	1	117	5
23870	452	23	618	108

XING W/L

XING E/L

Ped	Sch	Ped	Sch
73	21	39	5
131	30	94	0
144	2	90	0
115	11	108	####
145	13	115	####
145	6	132	####
753	83	578	####

Hours
7-8
8-9
9-10
15-16
16-17
17-18

TOTAL

Th

Rt Total

ITM Peak Hour Summary Prepared by:

La Brea Ave and Rodeo Rd , Baldwin Hills







Total Volume Per Leg



Project ID:	15-5630-00	4	τοταις							Day: Thursday			
City:	Baldwin Hill	s				101/	ALS			Date: 10/1/2015			
r						A	N						
NS/EW Streets:	La	a Brea Ave		L	a Brea Ave			Rodeo Rd		Rodeo Rd			
	N	ORTHBOUN	D) S		ID	E	EASTBOUND		WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
7:00 AM	42	463	1	36	275	62	15	90	7	31	340	128	1490
7:15 AM	27	464	3	63	284	53	59	95	13	37	368	154	1620
7:30 AM	45	439	3	70	341	56	55	83	5	41	298	106	1542
7:45 AM	62	481	6	64	383	72	40	124	23	37	304	99	1695
8:00 AM	35	443	8	48	352	69	32	150	21	30	286	77	1551
8:15 AM	32	491	6	52	373	81	48	130	14	22	250	84	1583
8:30 AM	42	415	8	43	349	126	44	109	8	48	235	87	1514
8:45 AM	49	422	15	68	414	87	46	100	9	38	255	92	1595
9:00 AM	38	450	8	48	343	67	52	104	16	45	231	79	1481
9:15 AM	35	448	14	43	383	52	60	113	11	39	171	76	1445
9:30 AM	30	415	14	57	366	37	52	110	21	43	193	79	1417
9:45 AM	33	414	12	51	367	73	49	97	7	25	162	91	1381
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES : APPROACH %'s :	470 7.95%	5345 90.39%	98 1.66%	643 11.26%	4230 74.11%	835 14.63%	552 27.44%	1305 64.86%	155 7.70%	436 9.31%	3093 66.08%	1152 24.61%	18314
PEAK HR START TIME :	715	AM											TOTAL
PEAK HR VOL :	169	1827	20	245	1360	250	186	452	62	145	1256	436	6408
PEAK HR FACTOR :		0.918			0.894			0.862			0.822		0.945

Project ID:				тот		Day: Thursday							
City:		5				PI	N						
NS/EW Streets:	La	a Brea Ave		La Brea Ave Rodeo Rd									
	N	ORTHBOUN	D	SOUTHBOUND			EASTBOUND			V			
	NL 1	NT 3	NR	SL 1	ST	SR 1	EL 1	ET 3	ER	WL 1	WT	WR 1	TOTAL
LANES.	1.1	0	0	1	0			0	0	1.1	-		
3:00 PM	18	384	20	66	386	41	63	209	16	37	156	85	1481
3:15 PM	24	397	14	64	424	51	62	221	16	45	118	94	1530
3:30 PM	21	373	20	73	399	41	64	232	17	35	127	90	1492
3:45 PM	22	417	21	81	468	32	51	244	11	33	145	95	1620
4:00 PM	26	386	25	69	437	44	69	277	18	41	122	84	1598
4:15 PM	23	415	15	75	496	55	59	255	12	45	137	72	1659
4:30 PM	23	380	20	74	442	43	65	264	10	51	133	91	1596
4:45 PM	27	452	17	73	506	55	53	293	15	29	157	75	1752
5:00 PM	20	399	9	69	460	67	68	258	15	54	126	75	1620
5:15 PM	21	407	15	72	465	32	52	314	10	43	109	89	1629
5:30 PM	32	394	18	77	465	50	68	259	15	59	141	85	1663
5:45 PM	33	434	25	79	522	49	56	256	15	41	160	76	1746
TOTAL VOLUMES : APPROACH %'s :	NL 290 5.42%	NT 4838 90.48%	NR 219 4.10%	SL 872 12.63%	ST 5470 79.25%	SR 560 8.11%	EL 730 18.33%	ET 3082 77.40%	ER 170 4.27%	WL 513 16.26%	WT 1631 51.70%	WR 1011 32.04%	TOTAL 19386
PEAK HR START TIME :	445 F	PM											TOTAL
PEAK HR VOL :	100	1652	59	291	1896	204	241	1124	55	185	533	324	6664
PEAK HR FACTOR :		0.913			0.943			0.944			0.914		0.951

	Project ID:	CAPS Day: Thursday												
	City:	Baldwin Hill	s				CA	KS				Date:	10/1/2015	
	1						A	M						
	NS/EW Streets:	L	a Brea Ave		L	a Brea Ave			Rodeo Rd			Rodeo Rd		
		N	ORTHBOUN	D	S	OUTHBOUN	ID	E	EASTBOUND)	V	VESTBOUN	D	
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
-	7:00 AM	42	456	1	35	267	60	12	83	6	31	334	124	1451
	7:15 AM	27	456	3	61	279	48	58	91	13	37	360	149	1582
	7:30 AM	43	429	3	70	334	53	52	82	5	41	292	104	1508
	7:45 AM	62	470	6	59	376	70	40	121	23	37	299	99	1662
	8:00 AM	35	438	8	45	343	67	30	145	21	30	279	75	1516
	8:15 AM	31	487	6	51	370	78	48	125	13	22	243	82	1556
	8:30 AM	42	408	8	41	340	126	43	103	8	48	232	85	1484
	8:45 AM	48	415	14	65	411	84	45	98	9	38	253	89	1569
	9:00 AM	38	439	8	46	330	66	52	101	16	45	224	76	1441
	9:15 AM	34	438	13	43	373	50	57	110	11	38	164	73	1404
	9:30 AM	29	408	13	56	354	36	51	107	21	43	188	74	1380
	9:45 AM	33	402	10	49	363	73	49	92	7	25	158	87	1348
-		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	TOTAL VOLUMES :	464	5246	93 1.60%	621	4140	811	537	1258	153	435	3026	1117	17901
	APPROACH 76 S .	8.00%	90.4076	1.00 /8	11.1376	74.3076	14.5576	27.5776	04.3076	1.0378	9.3076	00.1076	24.4070	
	PEAK HR START TIME :	715 /	AM											TOTAL
	PEAK HR VOL :	167	1793	20	235	1332	238	180	439	62	145	1230	427	6268
	PEAK HR FACTOR :		0.920			0.894			0.869			0.825		0.943

Project ID:	15-5630-00	4		Day: Thursday									
City:	Baldwin Hill	s				CAI	RS				Date:	10/1/2015	
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave	Ph	<u>/I</u>	Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	D	S	OUTHBOUN	D	E	EASTBOUND)	V	VESTBOUNI	C	
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM	18 24 19 21 26 23 22 27 20 21 31 32	378 388 362 398 378 411 376 442 394 400 387 428	20 11 20 21 25 15 19 16 9 14 18 25	66 60 71 77 66 74 72 68 67 72 77 78	379 416 394 457 425 488 430 501 458 456 459 516	39 48 41 32 43 53 43 53 43 53 65 32 50 49	60 62 51 67 58 63 52 68 50 68 50 68 56	203 221 226 236 273 249 259 288 254 308 254 308 258 255	16 15 10 18 12 10 15 15 9 15 14	36 44 35 33 41 44 51 29 51 43 59 41	152 115 122 138 115 135 129 155 122 108 138 157	83 87 89 94 82 69 89 74 72 85 85 85 76	1450 1490 1456 1568 1559 1631 1563 1720 1595 1598 1645 1727
TOTAL VOLUMES : APPROACH %'s :	NL 284 5.42%	NT 4742 90.51%	NR 213 4.07%	SL 848 12.52%	ST 5379 79.39%	SR 548 8.09%	EL 715 18.29%	ET 3030 77.49%	ER 165 4.22%	WL 507 16.47%	WT 1586 51.53%	WR 985 32.00%	TOTAL 19002
PEAK HR START TIME :											TOTAL		
PEAK HR VOL :	99	1623	57	284	1874	200	238	1108	54	182	523	316	6558
PEAK HR FACTOR :	PEAK HR FACTOR : 0.917					0.948 0.954 0.905							0.953

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

DAY:

PROJECT#:15-5630-004N/S Street:La Brea AveE/W Street:Rodeo RdDATE:10/1/2015CITY:Baldwin Hills

A M Adult Pedestria

Adult	Pedestrians

TIME	NORT	H LEG	SOUT	H LEG	EAST	LEG	WEST	Г LEG
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	6	9	5	10	1	1	1	1
7:15 AM	9	9	4	6	1	4	5	17
7:30 AM	15	12	5	11	7	8	14	12
7:45 AM	5	4	4	5	6	11	8	15
8:00 AM	7	16	7	15	14	5	16	21
8:15 AM	7	8	6	14	16	8	6	27
8:30 AM	12	19	10	6	14	9	9	21
8:45 AM	19	14	8	6	19	9	15	16
9:00 AM	25	26	10	16	13	8	27	17
9:15 AM	9	8	5	12	9	13	18	19
9:30 AM	10	9	7	10	11	7	17	20
9:45 AM	10	9	8	9	18	11	12	14
TOTALS	134	143	79	120	129	94	148	200

ТІМЕ	NORT	H LEG	SOUT	H LEG	EAST	LEG	WES	T LEG
TIVIE	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	8	1	7	0	5	0	6	2
7:15 AM	3	1	3	0	0	0	3	6
7:30 AM	10	3	0	2	0	0	0	2
7:45 AM	0	0	0	0	0	0	2	0
8:00 AM	2	0	0	0	0	0	0	9
8:15 AM	0	0	0	0	0	0	0	15
8:30 AM	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	1	0
9:30 AM	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0
TOTALS	23	5	10	2	5	0	12	41

РМ

Adult Pedestrians

TIME	NORT	H LEG	SOUT	H LEG	EAST	「 LEG	WES	T LEG
TIVIE	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	13	16	8	9	8	9	12	10
3:15 PM	15	8	2	9	8	2	17	14
3:30 PM	10	5	7	12	24	15	15	13
3:45 PM	12	23	20	14	29	13	16	18
4:00 PM	16	14	7	13	8	9	18	8
4:15 PM	12	20	4	13	16	11	30	22
4:30 PM	15	15	9	8	20	13	20	9
4:45 PM	10	20	14	14	28	10	17	21
5:00 PM	15	22	11	14	15	9	22	15
5:15 PM	12	11	5	19	24	16	19	12
5:30 PM	8	28	9	15	16	8	24	18
5:45 PM	7	14	5	12	27	17	21	14
TOTALS	145	196	101	152	223	132	231	174

School-Aged Pedestrians

Thursday

School-Aged Pedestrians

TIME	NORT	H LEG	SOUT	H LEG	EAST	T LEG	WEST	T LEG
TIVE	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	1	16	0	10	8	9	5	0
3:15 PM	6	8	0	0	12	7	0	0
3:30 PM	20	19	0	0	0	1	2	0
3:45 PM	0	4	0	0	6	2	2	2
4:00 PM	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	2	4
4:30 PM	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	1	3
5:00 PM	0	0	0	1	0	0	2	0
5:15 PM	0	0	0	0	0	0	1	2
5:30 PM	0	3	0	0	0	0	1	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	28	52	0	11	26	16	17	13

Project ID:	15-5630-00	4		Day: Thursday									
City: I	Baldwin Hill	s				BIK	E5				Date:	10/1/2015	
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave		И	Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	D	S	OUTHBOUN	D	E	EASTBOUND)	V	VESTBOUN	D	
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
7:00 AM	0	2	0	0	4	0	0	1	0	1	1	0	9
7:15 AM 7:30 AM	0 1	0	0	0	0	0	0	0	0	0	2 0	0 1	3
7:45 AM 8:00 AM	0 0	1 1	0 0	1 1	1 1	0 0	0 0	2 2	0 0	0 0	0 0	0 0	5 5
8:15 AM	0	2	0	0	0	0	0	0	0	0	1	0	3
8:45 AM	0	2	0	1	1	0	0	0	0	0	0	0	4
9:00 AM 9:15 AM	0	4 3	0	0	4 3	0	0 1	0 1	0	0	1	0	9
9:30 AM 9:45 AM	0 0	2 1	1 1	0 1	1 1	0 0	0 0	2 2	0 0	0 0	0 0	0 0	6 6
TOTAL VOLUMES: APPROACH %'s:	NL 1 4.35%	NT 20 86.96%	NR 2 8.70%	SL 5 21.74%	ST 18 78.26%	SR 0 0.00%	EL 1 8.33%	ET 11 91.67%	ER 0 0.00%	WL 1 12.50%	WT 6 75.00%	WR 1 12.50%	TOTAL 66
PEAK HR START TIME :	715 /	AM											TOTAL
PEAK HR VOL :	1	3	0	2	2	0	0	4	0	0	2	1	15
PEAK HR FACTOR :		1.000			0.500			0.500			0.375		0.750

Intersection Turning Movement

National Data & Surveying Services

Project ID:	Project ID: 15-5630-004					Day: Thursday							
City:	Baldwin Hill	s				BIR	M				Date:	10/1/2015	
NS/EW Streets:	L	a Brea Ave		L	a Brea Ave	_		Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	ID	S	OUTHBOUN	D		EASTBOUNE)	V	VESTBOUNI	D	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
3:00 PM	0	0	0	0	1	0	0	0	0	1	1	0	3
3:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	4
3:30 PM	1	4	0	0	2	0	0	2	1	0	2	0	12
3:45 PM	0	3	0	0	3	0	0	3	1	0	1	0	11
4:00 PM	0	4	0	0	4	0	0	1	0	0	3	0	12
4:15 PM	0	1	0	0	2	0	0	3	0	1	0	2	9
4:30 PM	1	0	0	0	4	0	0	1	0	0	0	1	7
4:45 PM	0	5	1	1	0	0	0	0	0	0	0	0	7
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	2	0	0	1	0	2	1	1	0	0	0	7
5:30 PM	1	1	0	0	1	0	0	0	0	0	2	0	5
5:45 PM	1	2	0	0	1	0	0	0	1	0	1	0	6
TOTAL VOLUMES : APPROACH %'s :	NL 4 13.79%	NT 24 82.76%	NR 1 3.45%	SL 1 4.76%	ST 20 95.24%	SR 0 0.00%	EL 2 11.76%	ET 11 64.71%	ER 4 23.53%	WL 2 11.76%	WT 10 58.82%	WR 5 29.41%	TOTAL 84
PEAK HR START TIME :	1 ME : 445 PM												TOTAL
PEAK HR VOL :	1	9	1	1	2	0	2	1	1	0	2	0	20
PEAK HR FACTOR :	ACTOR : 0.458				0.750 0.250					0.250			0.714

	Project ID: 1	15-5630-0	04		BUSES Day: Thursday									
	City: E	Baldwin Hi	lls									Date: 1	0/1/2015	
	NS/EW Streets:	I	La Brea Ave		L	a Brea Ave		VI	Rodeo Rd			Rodeo Rd		
		Ν	IORTHBOUN	D	S	OUTHBOUN	D		EASTBOUND)	V	VESTBOUNE)	
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	I	3	0	I.	3	1	I	3	0	1	2	I.	
	7:00 AM	0	1	0	0	3	0	0	3	0	0	1	0	8
	7:15 AM	0	3	0	0	3	0	0	2	0	0	1	0	9
	7:30 AM	0	2	0	0	2	0	0	1	0	0	3	0	8
	7:45 AM	0	4	0	0	3	0	0	1	0	0	1	0	9
	8:00 AM	0	1	0	0	4	0	0	2	0	0	3	0	10
	8:15 AM	0	0	0	0	1	0	0	1	0	0	4	0	6
	8:30 AM	0	4	0	0	3	0	0	2	0	0	1	0	10
	8:45 AM	0	2	0	1	1	0	0	1	0	0	2	0	7
	9:00 AM	0	2	0	0	3	0	0	1	0	0	2	1	9
	9:15 AM	0	2	0	0	5	0	0	1	0	0	1	0	9
	9:30 AM	0	0	0	0	1	0	0	0	0	0	2	1	4
	9:45 AM	0	2	0	0	1	0	0	3	0	0	1	0	7
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	TOTAL VOLUMES :	0	23	0	1	30	0	0	18	0	0	22	2	96
	APPROACH %'s :	0.00%	100.00%	0.00%	3.23%	96.77%	0.00%	0.00%	100.00%	0.00%	0.00%	91.67%	8.33%	
1	PEAK HR START TIME :	715	AM											TOTAL
	PEAK HR VOL :	0	10	0	0	12	0	0	6	0	0	8	0	36
			0.625			0.750			0.750			0.667		0.000
			0.025			0.750			0.750			0.007		0.700

Project ID: 1	Project ID: 15-5630-004					Day: Thursday BUSES							
City: E	Baldwin Hill	s				BUS	123				Date: 1	0/1/2015	
						PI	N						
NS/EW Streets:	La	a Brea Ave		L	a Brea Ave			Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	D	S	OUTHBOUN	D		EASTBOUND)	١	NESTBOUNE)	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
3:00 PM	0	3	0	0	4	0	0	2	0	0	3	0	12
3:15 PM	0	1	0	0	3	0	0	0	0	0	1	0	5
3:30 PM	0	1	0	0	1	0	0	2	0	0	1	0	5
3:45 PM	1	8	0	0	5	0	0	3	0	0	2	0	19
4:00 PM	0	1	0	0	3	0	0	2	0	0	0	0	6
4:15 PM	0	3	0	0	4	0	0	2	0	0	2	0	11
4:30 PM	0	2	0	0	3	0	0	3	0	0	3	0	11
4:45 PM	0	2	0	0	5	0	0	2	0	0	2	0	11
5:00 PM	0	2	0	0	1	0	0	0	0	0	3	0	6
5:15 PM	0	2	1	0	5	0	0	3	0	0	0	0	11
5:30 PM	0	1	0	0	3	0	0	1	0	0	1	0	6
5:45 PM	0	1	0	0	1	0	0	1	0	0	2	0	5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	27	1	0	38	0	0	21	0	0	20	0	108
APPROACH %'s :	PROACH %'s : 3.45% 93.10% 3.45%				100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	K HR START TIME : 445 PM												TOTAL
PEAK HR VOL :	0	7	1	0	14	0	0	6	0	0	6	0	34
		0.700			0.500			0.500		0 773			
LAKTIKTACTOR .		0.007			0.700			0.000			0.500		0.775

Project ID:	Day: Thursday												
City	Baldwin Hill	c				HEAVY 1	RUCKS				Date	10/1/2015	
City:		5				A	И				Date:	10/1/2015	
NS/EW Streets:	La	a Brea Ave		L	a Brea Ave			Rodeo Rd			Rodeo Rd		
I	N	ORTHBOUN	D	S	OUTHBOUN	ID	E	EASTBOUND)	V	VESTBOUN	D	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
7:00 AM	0	6	0	1	5	2	3	4	1	0	5	4	31
7:15 AM	0	5	0	2	2	5	1	2	0	0	7	5	29
7:30 AM	2	8	0	0	5	3	3	0	0	0	3	2	26
7:45 AM	0	7	0	5	4	2	0	2	0	0	4	0	24
8:00 AM	0	4	0	3	5	2	2	3	0	0	4	2	25
8:15 AM	1	4	0	1	2	3	0	4	1	0	3	2	21
8:30 AM	0	3	0	2	6	0	1	4	0	0	2	2	20
8:45 AM	1	5	1	2	2	3	1	1	0	0	0	3	19
9:00 AM	0	9	0	2	10	1	0	2	0	0	5	2	31
9:15 AM	1	8	1	0	5	2	3	2	0	1	6	3	32
9:30 AM	1	7	1	1	11	1	1	3	0	0	3	4	33
9:45 AM	0	10	2	2	3	0	0	2	0	0	3	4	26
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	76	5	21	60	24	15	29	2	1	45	33	317
APPROACH %'s :	6.90%	87.36%	5.75%	20.00%	57.14%	22.86%	32.61%	63.04%	4.35%	1.27%	56.96%	41.77%	
PEAK HR START TIME :	715 /	AM											TOTAL
PEAK HR VOL :	2	24	0	10	16	12	6	7	0	0	18	9	104
PEAK HR FACTOR :		0.650			0.864			0.650		0.563			0.897

Project ID: 1	Project ID: 15-5630-004 City: Baldwin Hills					HEAVY 1	Day: Thursday						
City: E	Baldwin Hill	S				Ы	M			Date: 10/1/2015			
NS/EW Streets:	L	a Brea Ave		La Brea Ave			Rodeo Rd			Rodeo Rd			
	N	ORTHBOUN	ID SOUTHBO			UND EASTBOUND			WESTBOUND				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	1	1	3	0	1	2	1	
3:00 PM	0	3	0	0	3	2	3	4	0	1	1	2	19
3:15 PM	0	8	3	4	5	3	2	0	0	1	2	7	35
3:30 PM	2	10	0	2	4	0	2	4	2	0	4	1	31
3:45 PM	0	11	0	4	6	0	0	5	1	0	5	1	33
4:00 PM	0	7	0	3	9	1	2	2	0	0	7	2	33
4:15 PM	0	1	0	1	4	2	1	4	0	1	0	3	17
4:30 PM	1	2	1	2	9	0	2	2	0	0	1	2	22
4:45 PM	0	8	1	5	0	2	1	3	0	0	0	1	21
5:00 PM	0	3	0	2	1	2	0	4	0	3	1	3	19
5:15 PM	0	5	0	0	4	0	2	3	1	0	1	4	20
5:30 PM	1	6	0	0	3	0	0	0	0	0	2	0	12
5:45 PM	1	5	0	1	5	0	0	0	1	0	1	0	14
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	5	69	5	24	53	12	15	31	5	6	25	26	276
APPROACH %'s :	6.33%	87.34%	6.33%	26.97%	59.55%	13.48%	29.41%	60.78%	9.80%	10.53%	43.86%	45.61%	
PEAK HR START TIME :	445	PM											TOTAL
PEAK HR VOL :	1	22	1	7	8	4	3	10	1	3	4	8	72
PEAK HR FACTOR :		0.667			0.679			0.583			0.536		0.857



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	Martin Luthe	er King Jr. Bl	vd					
East/West	Rodeo Rd							
Day:	Thursday	Date	:0	ctober 1, 2015	Weather:	2	SUNNY	
Hours: 7-	10 & 3-6			Chekrs:	NDS			
School Day:	YES	Distr	rict:		I/S CO	DE _		
DUAL-	N/B		S/B		E/B		W/B	
WHEELED	0		0		0		0	
BUSES	0		0		0		0	
	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	406	7.15	0	0.00	222	8.15	191	7.15
PM PK 15 MIN	232	15.00	0	0.00	433	17.15	139	17.45
AM PK HOUR	1435	7.00	0	0.00	829	7.45	668	7.00
PM PK HOUR	818	15.00	0	0.00	1613	16.30	467	17.00

NORTHBOUND Approach

EASTBOUND Approach

Lt

Hours	Lt	Th	Rt	Total
7-8	1378	0	57	1435
8-9	1171	0	126	1297
9-10	905	0	45	950
15-16	776	0	42	818
16-17	748	0	50	798
17-18	727	0	77	804
	-			
TOTAL	5705	0	397	6102

Th

Rt Total

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
15-16	0	0	0	0
16-17	0	0	0	0
17-18	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	39	629	0	668
8-9	55	443	0	498
9-10	28	407	0	435
15-16	41	388	0	429
16-17	53	359	0	412
17-18	67	400	0	467
TOTAL	283	2626	0	2909

TOTAL XING S/L

TOTAL

E-W

XING N/L

Sch

Sch

N-S	Ped	Sch	Ped
1435	0	0	0
1297	0	0	0
950	0	0	0
818	0	0	0
798	0	0	0
804	0	0	0
6102	0	0	0

XING E/L

E-W	Ped	Sch	Ped
1373	0	0	0
1312	0	0	0
1224	0	0	0
1768	0	0	0
1994	0	0	0
2055	0	0	0
9726	0	0	0

XING W/L

Hours
7-8
8-9
9-10
15-16
16-17
17-18
TOTAL

ITM Peak Hour Summary

Total Peak Hour Summary Southbound Approach Date: 10/1/2015 Project #: 15-5630-005 Martin Luther King Jr. Blvd Lanes 0 0 0 Day: Thursday City: Baldwin Hills 0 0 0 0 АМ AM 700 AM AM Peak Hour 0 0 0 0 NOON NOON NOON Peak Hour PM Peak Hour 500 PM 0 0 0 0 РМ РМ ÎÌ Rodeo Rd PM АМ NOON РМ АМ NOON Lanes Westbound Approach Eastbound Approach 0 0 0 0 2007 0 1127 629 0 400 2 CONTROL Signalized 0 0 0 0 39 0 67 491 1.5 283 0 340 0 568 1.5 422 0 1097 РМ Lanes AM NOON РМ AM NOON ľ Count Periods Start 461 1378 0 57 End AM AM 7:00 AM 10:00 AM AM 0 0 0 0 NOON NOON NOON 1164 727 0 77 PM PM РМ 3:00 PM 6:00 PM 3 0 1 Lane **Northbound Approach**

Martin Luther King Jr. Blvd and Rodeo Rd , Baldwin Hills





Total Volume Per Leg



Project ID:	15-5630-00	5					Day: Thursday						
City:	Baldwin Hills	S				TOT. AI	Date: 10/1/2015						
NS/EW Streets:	Martin Lu	uther King J	r. Blvd	Martin I	uther King	Jr. Blvd		Rodeo Rd					
	NC	ORTHBOUN	D	5	SOUTHBOU	ND	E	EASTBOUN)	V	VESTBOUND)	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	3	0	1	0	0	0	0	1.5	1.5	1	2	0	
7:00 AM	353	0	14	0	0	0	0	74	85	1	143	0	670
7:15 AM	396	0	10	0	0	0	0	71	93	7	184	0	761
7:30 AM	315	0	14	0	0	0	0	82	85	12	149	0	657
7:45 AM	314	0	19	0	0	0	0	56	159	19	153	0	720
8:00 AM	277	0	32	0	0	0	0	76	132	13	131	0	661
8:15 AM	297	0	38	0	0	0	0	66	156	13	102	0	672
8:30 AM	295	0	29	0	0	0	0	73	111	19	98	0	625
8:45 AM	302	0	27	0	0	0	0	80	120	10	112	0	651
9:00 AM	265	0	16	0	0	0	0	63	125	10	109	0	588
9:15 AM	208	0	9	0	0	0	0	61	138	2	108	0	526
9:30 AM	235	0	12	0	0	0	0	71	130	8	94	0	550
9:45 AM	197	0	8	0	0	0	0	64	137	8	96	0	510
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES : APPROACH %'s :	3454 93.81%	0 0.00%	228 6.19%	0 #DIV/0!	0 #DIV/0!	0 #DIV/0!	0 0.00%	837 36.27%	1471 63.73%	122 7.62%	1479 92.38%	0 0.00%	7591
PEAK HR START TIME :	700 A	M											TOTAL
PEAK HR VOL :	1378	0	57	0	0	0	0	283	422	39	629	0	2808
PEAK HR FACTOR :		0.884			0.000			0.820			0.874		0.922

Project ID: City: ∣		TOTALS PM							Day: Inursday Date: 10/1/2015				
NS/EW Streets:	Martin Lu	Ither King J	r. Blvd	Martin Luther King Jr. Blvd			Rodeo Rd						
I	NC	DRTHBOUN	D	SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 3	NT 0	NR 1	SL 0	ST 0	SR 0	EL O	ET 1.5	ER 1.5	WL 1	WT 2	WR 0	TOTAL
3:00 PM 3:15 PM	223 190	0 0	9 8	0 0	0 0	0 0	0 0	101 86	210 232	6 15	89 105	0 0	638 636
3:30 PM	182	0	10 15	0	0	0	0	108	233	10 10	82 112	0	625
4:00 PM	201	0	9	0	0	0	0	116	294	12	78	0	710
4:15 PM 4:30 PM	186 166	0 0	13 14	0 0	0 0	0 0	0 0	112 115	249 275	9 15	92 102	0 0	661 687
4:45 PM 5:00 PM	195 180	0	14 15	0	0	0	0	141 87	280 282	17 15	87 94	0	734 673
5:15 PM	165	0	13	0	0	0	0	145	288	15	90	0	716
5:30 PM 5:45 PM	203 179	0	20 29	0	0	0	0	139	269	24	115	0	755
TOTAL VOLUMES : APPROACH %'s :	NL 2251 93.02%	NT 0 0.00%	NR 169 6.98%	SL 0 #DIV/0!	ST 0 #DIV/0!	SR 0 #DIV/0!	EL 0 0.00%	ET 1388 30.78%	ER 3121 69.22%	WL 161 12.31%	WT 1147 87.69%	WR 0 0.00%	TOTAL 8237
PEAK HR START TIME :	500 F	PM											TOTAL
PEAK HR VOL :	727	0	77	0	0	0	0	491	1097	67	400	0	2859
PEAK HR FACTOR :		0.901			0.000			0.917			0.840		0.947

	Project ID:	15-5630-005	5					Day: Thursday							
	City:	Baldwin Hills	5				CA	RS			Date: 10/1/2015				
					АМ										
	NS/EW Streets:	Martin Lu	ither King J	r. Blvd	Ivd Martin Luther King Jr. Blvd Rodeo Rd					Rodeo Rd					
		NC	DRTHBOUN	D		SOUTHBOUM	ND	E	ASTBOUNE)	V	VESTBOUND)		
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	LANES:	3	0	1	0	0	0	0	1.5	1.5	1	2	0		
-	7:00 AM	353	0	14	0	0	0	0	74	85	1	143	0	670	
	7:15 AM	396	0	10	0	0	0	0	71	93	7	184	0	761	
	7:30 AM	315	0	14	0	0	0	0	82	85	12	149	0	657	
	7:45 AM	314	0	19	0	0	0	0	56	159	19	153	0	720	
	8:00 AM	277	0	32	0	0	0	0	76	132	13	131	0	661	
	8:15 AM	297	0	38	0	0	0	0	66	156	13	102	0	672	
	8:30 AM	295	0	29	0	0	0	0	73	111	19	98	0	625	
	8:45 AM	302	0	27	0	0	0	0	80	120	10	112	0	651	
	9:00 AM	265	0	16	0	0	0	0	63	125	10	109	0	588	
	9:15 AM	208	0	9	0	0	0	0	61	138	2	108	0	526	
	9:30 AM	235	0	12	0	0	0	0	71	130	8	94	0	550	
	9:45 AM	197	0	8	0	0	0	0	64	137	8	96	0	510	
-		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	TOTAL VOLUMES : APPROACH %'s :	3454 93.81%	0 0.00%	228 6.19%	0	0	0	0 0.00%	837 36.27%	1471 63.73%	122 7.62%	1479 92.38%	0 0.00%	7591	
ſ	PEAK HR START TIME :	700 A	M											TOTAL	
	PEAK HR VOL :	1378	0	57	0	0	0	0	283	422	39	629	0	2808	
	PEAK HR FACTOR :		0.884			0.000			0.820			0.874		0.922	

Project ID: 7	15-5630-005	5				CA	Day: Thursday						
City: I	Baldwin Hills	3				P	M						
NS/EW Streets:	Martin Lu	ither King J	r. Blvd	Martin Luther King Jr. Blvd			Rodeo Rd			Rodeo Rd			
	NC	DRTHBOUN	D	SOUTHBOUND			EASTBOUND			V			
LANES:	NL 3	NT 0	NR 1	SL 0	ST 0	SR 0	EL O	ET 1.5	ER 1.5	WL 1	WT 2	WR 0	TOTAL
3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM	223 190 182 181 201 186 166 195 180	0 0 0 0 0 0 0 0 0	9 8 10 15 9 13 14 14 15	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	101 86 108 118 116 112 115 141 87	210 232 233 251 294 249 275 280 282	6 15 10 10 12 9 15 17 15	89 105 82 112 78 92 102 87 94	0 0 0 0 0 0 0 0	638 636 625 687 710 661 687 734 673
5:15 PM 5:30 PM 5:45 PM	165 203 179	0 0 0	13 20 29	0 0 0	0 0 0	0 0 0	0 0 0	145 120 139	288 258 269	15 13 24	90 101 115	0 0 0	716 715 755
TOTAL VOLUMES : APPROACH %'s :	NL 2251 93.02%	NT 0 0.00%	NR 169 6.98%	SL O	ST O	SR 0	EL 0 0.00%	ET 1388 30.78%	ER 3121 69.22%	WL 161 12.31%	WT 1147 87.69%	WR 0 0.00%	TOTAL 8237
PEAK HR START TIME : PEAK HR VOL : PEAK HR FACTOR :	500 P 727	0 0.901	77	0	0	0	0	491 0.917	1097	67	400 0.840	0	TOTAL 2859 0.947



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	Farmdale Av	/e						
East/West	Rodeo Rd							
Day:	Thursday	Date:	O	ctober 1, 2015	Weather:	-	SUNNY	
Hours: 7-10 &	2 3-6			Chekrs:	NDS			
School Day:	YES	District:	-		I/S CO	DE		
DUAL- WHEELED BIKES BUSES	<u>N/B</u> 0 1 0 N/B	TIME	S/B 0 15 0 S/B	TIME	<u>E/B</u> 0 9 0 E/B	TIME	W/B 0 9 0 W/B	TIME
AM PK 15 MIN	42	7.30	69	7.30	109	8.15	210	7.30
PM PK 15 MIN	19	15.15	136	17.30	152	17.45	116	15.15
AM PK HOUR	140	7.15	241	7.30	421	8.00	787	7.15
PM PK HOUR	47	16.30	493	17.00	527	17.00	396	15.00

NORTHBOUND Approach

EASTBOUND Approach

Lt

Hours	Lt	Th	Rt	Total
7-8	29	30	72	131
8-9	11	15	33	59
9-10	7	6	20	33
15-16	6	7	28	41
16-17	3	10	24	37
17-18	6	7	30	43
	-			
TOTAL	62	75	207	344

Th

Rt Total

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	78	4	122	204
8-9	92	7	129	228
9-10	54	8	115	177
15-16	159	10	160	329
16-17	200	17	193	410
17-18	237	27	229	493
TOTAL	820	73	948	1841

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	490	276	773
8-9	6	377	223	606
9-10	3	274	133	410
15-16	8	264	124	396
16-17	9	217	108	334
17-18	5	230	131	366
TOTAL	38	1852	995	2885

TOTAL	XING S/L
TOTAL	

TOTAL

XING N/L

N-S	Ped	Sch	Ped	Sch
335	15	43	55	8
287	34	4	15	1
210	10	0	6	0
370	15	21	23	36
447	8	1	24	3
536	12	0	27	3
2185	94	69	150	51

XING W/L

XING E/L

E-W	Ped	Sch	Ped	Sch
1049	31	70	31	48
1027	49	20	15	4
704	17	0	11	1
847	33	44	34	41
830	22	1	36	2
893	23	1	32	6
5350	175	136	159	102

Hours
7-8
8-9
9-10
15-16
16-17
17-18
TOTAL

ITM Peak Hour Summary Prepared by:

Farmdale Ave and Rodeo Rd , Baldwin Hills







Total Volume Per Leg



Project ID:	15-5630-00	6				тот					Day:	Thursday		
City:	Baldwin Hill	s		TOTALS							Date: 10/1/2015			
	-			AM										
NS/EW Streets:	Fa	irmdale Ave	9	Fa	rmdale Ave	9		Rodeo Rd			Rodeo Rd			
	N	ORTHBOUN	ID	SOUTHBOUND			EASTBOUND			V				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	1	0	0	1	0	1	2	0	1	2	0		
7:00 AM	3	2	11	12	2	31	25	48	1	1	95	73	304	
7:15 AM	9	15	17	10	1	22	8	47	0	0	131	61	321	
7:30 AM	8	8	26	33	0	36	16	55	0	2	134	74	392	
7:45 AM	9	5	18	23	1	33	12	63	1	4	130	68	367	
8:00 AM	8	5	12	34	1	21	16	87	2	1	121	61	369	
8:15 AM	1	1	4	21	3	35	32	76	1	4	102	67	347	
8:30 AM	2	7	10	22	2	36	27	71	1	0	88	56	322	
8:45 AM	0	2	7	15	1	37	36	72	0	1	66	39	276	
9:00 AM	0	3	5	7	0	39	22	48	1	1	67	40	233	
9:15 AM	2	1	9	21	4	29	27	48	1	1	77	39	259	
9:30 AM	2	2	3	14	3	21	26	51	1	0	61	30	214	
9:45 AM	3	0	3	12	1	26	18	50	1	1	69	24	208	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	47 21.08%	51 22.87%	125 56.05%	224 36.78%	19 3.12%	366 60.10%	265 26.74%	716 72.25%	10 1.01%	16 0.89%	1141 63.78%	632 35.33%	3612	
									· ·				TOTAL	
PEAK HR START TIME :	/30/	4171											TOTAL	
PEAK HR VOL :	26	19	60	111	5	125	76	281	4	11	487	270	1475	
PEAK HR FACTOR :		0.625			0.873			0.828			0.914		0.941	

Project ID: City: ∣		TOTALS PM							Day: Thursday Date: 10/1/2015				
NS/EW Streets:	Fa	rmdale Ave	•	Farmdale Ave			Rodeo Rd			Rodeo Rd			
I	N	ORTHBOUN	D	SOUTHBOUND		D	E	ASTBOUND	1	V	VESTBOUNI)	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	2	0	1	2	0	
3:00 PM	1	2	7	32	0	41	20	75	4	2	57	29	270
3:15 PM	4	3	12	47	3	42	17	83	2	5	69	42	329
3:30 PM	1	1	5	38	2	38	31	80	3	1	57	22	279
3:45 PM	0	1	4	42	5	39	30	103	3	0	81	31	339
4:00 PM	0	4	2	55	5	36	24	91	2	2	55	27	303
4:15 PM	0	2	3	60	5	52	25	87	1	3	47	29	314
4:30 PM	2	1	10	51	2	53	28	96	1	1	62	26	333
4:45 PM	1	3	9	34	5	52	25	113	3	3	53	26	327
5:00 PM	2	1	5	57	7	50	20	84	3	2	54	29	314
5:15 PM	2	2	9	53	7	50	28	110	3	0	58	38	360
5:30 PM	1	1	6	67	5	64	29	93	5	0	45	36	352
5:45 PM	1	3	10	60	8	65	34	114	4	3	73	28	403
	NL 1E	NT 24	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	12.40%	24 19.83%	82 67.77%	596 48.38%	54 4.38%	582 47.24%	21.10%	76.59%	34 2.31%	22 2.01%	64.87%	303 33.12%	3923
PEAK HR START TIME :	500 l	PM											TOTAL
PEAK HR VOL :	6	7	30	237	27	229	111	401	15	5	230	131	1429
PEAK HR FACTOR :		0.768			0.906			0.867			0.880		0.886

	Project ID:	15-5630-00	6									Day:	Thursday	
	City:	Baldwin Hill	s					RS M			Date: 10/1/2015			
	NS/EW Streets:	Fa	irmdale Ave	9	Fa	rmdale Ave	;	<u></u>	Rodeo Rd			Rodeo Rd		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			V			
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	LANES:	0	1	0	0	1	0	1	2	0	1	2	0	
	7:00 AM	3	2	11	12	2	31	25	48	1	1	95	73	304
	7:15 AM	9	15	17	10	1	22	8	47	0	0	131	61	321
	7:30 AM	8	8	26	33	0	36	16	55	0	2	134	74	392
	7:45 AM	9	5	18	23	1	33	12	63	1	4	130	68	367
	8:00 AM	8	5	12	34	1	21	16	87	2	1	121	61	369
	8:15 AM	1	1	4	21	3	35	32	76	1	4	102	67	347
	8:30 AM	2	7	10	22	2	36	27	71	1	0	88	56	322
	8:45 AM	0	2	7	15	1	37	36	72	0	1	66	39	276
	9:00 AM	0	3	5	7	0	39	22	48	1	1	67	40	233
	9:15 AM	2	1	9	21	4	29	27	48	1	1	77	39	259
	9:30 AM	2	2	3	14	3	21	26	51	1	0	61	30	214
	9:45 AM	3	0	3	12	1	26	18	50	1	1	69	24	208
4		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	TOTAL VOLUMES : APPROACH %'s :	47 21.08%	51 22.87%	125 56.05%	224 36.78%	19 3.12%	366 60.10%	265 26.74%	716 72.25%	10 1.01%	16 0.89%	1141 63.78%	632 35.33%	3612
	PEAK HR START TIME :	730 /	AM											TOTAL
	PEAK HR VOL :	26	19	60	111	5	125	76	281	4	11	487	270	1475
	PEAK HR FACTOR :		0.625			0.873			0.828			0.914		0.941

Project ID:	15-5630-00	6		CADS							Day: Thursday			
City:	Baldwin Hill	s		CARO							Date:	10/1/2015		
-				PM										
NS/EW Streets:	Fa	rmdale Ave	2	Farmdale Ave			Rodeo Rd							
	N	ORTHBOUN	D	SOUTHBOUND		D	E	EASTBOUND)	V	VESTBOUNI	C		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
LANES:	0	1	0	0	1	0	1	2	0	1	2	0		
3:00 PM	1	2	7	32	0	41	20	75	4	2	57	29	270	
3:15 PM	4	3	12	47	3	42	17	83	2	5	69	42	329	
3:30 PM	1	1	5	38	2	38	31	80	3	1	57	22	279	
3:45 PM	0	1	4	42	5	39	30	103	3	0	81	31	339	
4:00 PM	0	4	2	55	5	36	24	91	2	2	55	27	303	
4:15 PM	0	2	3	60	5	52	25	87	1	3	47	29	314	
4:30 PM	2	1	10	51	2	53	28	96	1	1	62	26	333	
4:45 PM	1	3	9	34	5	52	25	113	3	3	53	26	327	
5:00 PM	2	1	5	57	7	50	20	84	3	2	54	29	314	
5:15 PM	2	2	9	53	7	50	28	110	3	0	58	38	360	
5:30 PM	1	1	6	67	5	64	29	93	5	0	45	36	352	
5:45 PM	1	3	10	60	8	65	34	114	4	3	73	28	403	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
TOTAL VOLUMES : APPROACH %'s :	15 12.40%	24 19.83%	82 67.77%	596 48.38%	54 4.38%	582 47.24%	311 21.10%	1129 76.59%	34 2.31%	22 2.01%	711 64.87%	363 33.12%	3923	
PEAK HR START TIME :	500 F	PM											TOTAL	
PEAK HR VOL :	6	7	30	237	27	229	111	401	15	5	230	131	1429	
PEAK HR FACTOR :		0.768			0.906			0.867			0.880		0.886	

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-5630-006 N/S Street: Farmdale Ave E/W Street: Rodeo Rd DATE: 10/1/2015 CITY: Baldwin Hills **A M**

DAY: Thursday

Adult Pedestrians NORTH LEG SOUTH LEG EAST LEG WEST LEG ΤΙΜΕ EB WB EB WB NB SB NB SB 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM 9:15 AM 9:30 AM 9:45 AM TOTALS

School-Agea	Pedes	trians							
ТІМЕ	NORTH LEG		SOUT	SOUTH LEG		EAST LEG		WEST LEG	
TIVIE	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	
7:15 AM	3	0	0	0	0	0	0	0	
7:30 AM	0	3	0	18	18	8	25	0	
7:45 AM	2	0	0	25	19	3	45	0	
8:00 AM	0	1	0	2	4	0	15	0	
8:15 AM	0	0	0	1	0	0	4	0	
8:30 AM	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	1	0	0	1	0	
9:00 AM	0	0	0	0	0	0	0	0	
9:15 AM	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	1	0	0	0	
9:45 AM	0	0	0	0	0	0	0	0	
TOTALS	5	4	0	47	42	11	90	0	

РМ

Adult Pedestrians

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	2	0	1	1	2	1	3
3:15 PM	10	2	5	2	1	14	5	11
3:30 PM	4	0	0	1	1	4	2	3
3:45 PM	4	1	3	3	1	10	2	6
4:00 PM	10	0	0	3	1	8	3	3
4:15 PM	8	0	0	0	1	13	4	6
4:30 PM	5	1	1	2	0	10	3	3
4:45 PM	0	0	0	2	0	3	0	0
5:00 PM	7	3	1	2	0	6	2	3
5:15 PM	6	1	2	0	0	7	0	3
5:30 PM	3	2	4	0	4	6	7	4
5:45 PM	3	2	1	2	2	7	0	4
TOTALS	60	14	17	18	12	90	29	49

School-Aged Pedestrians

TIME	NORT	H LEG	SOUT	SOUTH LEG		EAST LEG		T LEG
TIVIE	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	2	0	0
3:15 PM	35	1	19	2	2	37	0	43
3:30 PM	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	1	0	0	0	0	1	0	1
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	1	0	0	0	1	1	0	0
5:45 PM	2	0	0	0	0	3	0	0
TOTALS	41	1	19	3	3	46	1	45

	Project ID:	15-5630-00	6				DU					Day:	Thursday	
	City:	Baldwin Hill	s				BIK	.ES			Date: 10/1/2015			
	NS/EW Streets:	Fa	rmdale Ave		Fa	rmdale Ave	AI e	VI	Rodeo Rd			Rodeo Rd		
•		NO	ORTHBOUN	D	SC	DUTHBOUN	ID	E	EASTBOUND)	V	VESTBOUN	D	
	LANES:	NL O	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
•	7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
	7:15 AM 7:30 AM	0	0	0	0	0	0	0	1 0	0	0	0	0 1	1 1
	7:45 AM	1	0	0	0	0	0	1	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
	8:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	2
	8:30 AM	0	0	0	0	0	1	0	0	0	0	0	1	2
	8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
	9:00 AM	0	0	0	0	0	0	1	0	0	0	1	0	2
	9:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	2
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	1	0	0	0	0	0	0	1	0	2
	TOTAL VOLUMES : APPROACH %'s :	NL 1 100.00%	NT 0 0.00%	NR 0 0.00%	SL 3 60.00%	ST 0 0.00%	SR 2 40.00%	EL 2 40.00%	ET 3 60.00%	ER 0 0.00%	WL 0 0.00%	WT 3 50.00%	WR 3 50.00%	TOTAL 17
	PEAK HR START TIME :	730 A	AM											TOTAL
	PEAK HR VOL :	1	0	0	1	0	0	1	1	0	0	0	2	6
	PEAK HR FACTOR :		0.250			0.250			0.500			0.500		0.750

Project ID: 1	15-5630-0	06									Day: ⊺	hursday	
City:	Baldwin H	ills				BIK	ES				Date: 1	0/1/2015	
						P	N				Dator		
NS/EW Streets:	F	armdale Ave	9	Fa	rmdale Ave	:		Rodeo Rd			Rodeo Rd		
		NORTHBOUN	ID	SC	DUTHBOUN	D	E	EASTBOUND	1	١	WESTBOUND)	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	2	0	1	2	0	
3:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	0	0	0	2	0	1	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	2	1	0	0	0	0	2	0	5
4:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	1	1	0	1	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES : APPROACH %'s :	0	0	0	4 40.00%	3 30.00%	3 30.00%	2 50.00%	2 50.00%	0 0.00%	0 0.00%	3 100.00%	0 0.00%	17
PEAK HR START TIME :	500	PM											TOTAL
PEAK HR VOL :	0	0	0	1	1	0	1	0	0	0	1	0	4
PEAK HR FACTOR :		0.000			0.250			0.250			0.250		0.333



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET: North/South	Crenshaw B	lvd						
East/West	Rodeo Rd							
Day:	Thursday	Date:	Dec	ember 18, 2014	Weather:		SUNNY	
Hours: 7-10 &	3-6			Chekrs:	NDS			
School Day:	YES	District:	-		I/S CO	DE		
DUAL- WHEELED BIKES BUSES	<u>N/B</u> 0 0 0		S/B 0 0 0		<u>E/B</u> 0 0 0		<u>W/B</u> 0 0 0	
	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	332	7.30	243	9.30	105	8.45	157	7.15
PM PK 15 MIN	278	17.00	348	17.00	139	17.15	96	17.15
AM PK HOUR	1283	7.15	875	9.00	360	7.30	579	7.15
PM PK HOUR	1053	16.15	1359	17.00	498	15.30	332	16.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	25	1202	15	1242
8-9	22	1101	21	1144
9-10	41	845	21	907
15-16	36	872	42	950
16-17	35	986	18	1039
17-18	28	912	19	959
TOTAL	187	5918	136	6241

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	22	547	61	630
8-9	21	698	98	817
9-10	33	727	115	875
15-16	46	1027	89	1162
16-17	36	1132	127	1295
17-18	64	1169	126	1359
TOTAL	222	5300	616	6138

Th

Total

Rt

WESTBOUND Approach

Lt

Γ

Hours

7-8

8-9

9-10

15-16

16-17

17-18

TOTAL

TOTAL	XING W/L	XING

XING S/L

Ped

Sch

XING

Ped

TOTAL

N-S

E-W	Ped	Sch	Ped
887	0	0	0
881	0	0	0
643	0	0	0
785	0	0	0
756	0	0	0
806	0	0	0
4758	0	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	129	165	33	327
8-9	110	204	32	346
9-10	95	173	33	301
15-16	131	269	75	475
16-17	128	275	62	465
17-18	140	300	46	486
TOTAL	733	1386	281	2400

N/L

Sch
0
0
0
0
0
0
0

E/L



ITM Peak Hour Summary Prepared by:

Crenshaw Blvd and Rodeo Rd , Los Angeles







Total Volume Per Leg



Intersection Turning Movement Prepared by:

National Data & Surveying Services

Project ID: 14-5817-003					TOTALS							Day: Thursday			
City:	AM							Date: 12/18/2014							
NS/EW Streets:	Crenshaw Blvd			Crenshaw Blvd			Rodeo Rd			Rodeo Rd					
	N	ORTHBOUN	ND S		OUTHBOUND		EASTBOUND			WESTBOUND					
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL		
LANES:	1	3	0	1	3	0	1	2	0	1	3	0			
7:00 AM	5	280	1	5	97	14	32	33	7	10	86	32	602		
7:15 AM	5	299	3	5	139	7	28	39	4	9	98	50	686		
7:30 AM	8	318	6	8	137	14	31	45	13	9	86	47	722		
7:45 AM	7	305	5	4	174	26	38	48	9	10	81	42	749		
8:00 AM	4	320	3	5	181	24	30	57	5	14	99	34	776		
8:15 AM	9	269	4	4	180	23	27	52	5	12	79	54	718		
8:30 AM	5	293	3	5	183	30	23	33	9	6	68	42	700		
8:45 AM	4	219	11	7	154	21	30	62	13	13	75	39	648		
9:00 AM	9	272	5	8	174	35	18	51	3	12	54	29	670		
9:15 AM	7	183	2	11	160	24	26	38	7	8	64	29	559		
9:30 AM	9	198	7	9	204	30	20	40	12	3	45	18	595		
9:45 AM	16	192	7	5	189	26	31	44	11	11	51	18	601		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL		
APPROACH %'s :	88 2.67%	3148 95.60%	57 1.73%	76 3.27%	1972 84.93%	274 11.80%	334 34.29%	542 55.65%	98 10.06%	8.14%	886 61.66%	434 30.20%	8026		
PEAK HR START TIME :	730 AM												TOTAL		
PEAK HR VOL :	28	1212	18	21	672	87	126	202	32	45	345	177	2965		
PEAK HR FACTOR :		0.947			0.929			0.947			0.964		0.955		

Intersection Turning Movement Prepared by:

National Data & Surveying Services

Project ID: 14-5817-003					TOTALS							Day: Thursday					
City: Los Angeles						PM							Date: 12/18/2014				
	NS/EW Streets:	Crenshaw Blvd			Crenshaw Blvd			Rodeo Rd			Rodeo Rd						
		N	ORTHBOUN	ND	SOUTHBOU			ND I		EASTBOUND		WESTBOUND					
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL			
	LANES:	1	3	0	1	3	0	1	2	0	1	3	0				
1	3:00 PM	9	238	6	14	261	19	29	49	17	6	41	11	700			
	3:15 PM	7	202	19	12	236	25	31	84	15	10	56	12	709			
	3:30 PM	11	242	9	8	262	18	38	66	25	10	49	22	760			
	3:45 PM	9	190	8	12	268	27	33	70	18	10	58	25	728			
	4:00 PM	14	247	3	11	268	33	29	64	22	15	39	17	762			
	4:15 PM	3	264	2	12	281	31	40	79	14	16	32	14	788			
	4:30 PM	11	252	8	6	310	29	29	49	12	7	50	15	778			
	4:45 PM	7	223	5	7	273	34	30	83	14	15	58	13	762			
	5:00 PM	9	266	3	13	308	27	29	78	11	12	47	15	818			
	5:15 PM	4	217	4	9	295	37	46	80	13	19	50	27	801			
	5:30 PM	11	212	7	15	287	32	33	59	11	12	50	14	743			
	5:45 PM	4	217	5	27	279	30	32	83	11	10	47	17	762			
1		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL			
	TOTAL VOLUMES : APPROACH %'s :	99 3.36%	2770 93.96%	79 2.68%	146 3.83%	3328 87.21%	342 8.96%	399 27.98%	844 59.19%	183 12.83%	142 15.42%	577 62.65%	202 21.93%	9111			
	PEAK HR START TIME :	430 PM												TOTAL			
		21	059	20	25	1196	127	124	200	50	52	205	70	2150			
	PEAK HR VUL :	51	900	20	30	1100	127	154	290	50	53	205	70	3139			
I	PEAK HR FACTOR :		0.907			0.968			0.853			0.854		0.965			
Intersection Turning Movement Prepared by:

National Data & Surveying Services

Project ID:	14-5817-0	03				C A	De				Day:	Thursday	
City:	Los Angele	es				AI	ks M				Date:	12/18/201	4
NS/EW Streets:	Cre	enshaw Blv	/d	Cre	enshaw Blv	/d		Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	ND	S	DUTHBOUI	ND	E	ASTBOUN	D	V	VESTBOUN	D	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	3	0	
7:00 AM	5	280	1	5	97	14	32	33	7	10	86	32	602
7:15 AM	5	299	3	5	139	7	28	39	4	9	98	50	686
7:30 AM	8	318	6	8	137	14	31	45	13	9	86	47	722
7:45 AM	7	305	5	4	174	26	38	48	9	10	81	42	749
8:00 AM	4	320	3	5	181	24	30	57	5	14	99	34	776
8:15 AM	9	269	4	4	180	23	27	52	5	12	79	54	718
8:30 AM	5	293	3	5	183	30	23	33	9	6	68	42	700
8:45 AM	4	219	11	7	154	21	30	62	13	13	75	39	648
9:00 AM	9	272	5	8	174	35	18	51	3	12	54	29	670
9:15 AM	7	183	2	11	160	24	26	38	7	8	64	29	559
9:30 AM	9	198	7	9	204	30	20	40	12	3	45	18	595
9:45 AM	16	192	7	5	189	26	31	44	11	11	51	18	601
TOTAL VOLUMES : APPROACH %'s :	NL 88 2.67%	NT 3148 95.60%	NR 57 1.73%	SL 76 3.27%	ST 1972 84.93%	SR 274 11.80%	EL 334 34.29%	ET 542 55.65%	ER 98 10.06%	WL 117 8.14%	WT 886 61.66%	WR 434 30.20%	TOTAL 8026
PEAK HR START TIME :	730	AM											TOTAL
PEAK HR VOL :	28	1212	18	21	672	87	126	202	32	45	345	177	2965
PEAK HR FACTOR :		0.947			0.929			0.947			0.964		0.955

CONTROL : Signalized

Intersection Turning Movement Prepared by:

National Data & Surveying Services

Project ID:	14-5817-0	03									Day:	Thursday	
City:	Los Angele	es				CA P	RS M				Date:	12/18/201	14
NS/EW Streets:	Cre	enshaw Blv	′d	Cre	enshaw Blv	٧d		Rodeo Rd			Rodeo Rd		
	N	ORTHBOUN	١D	S	OUTHBOUN	١D	E	ASTBOUN	D	V	VESTBOUN	ID	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	3	0	
3:00 PM	9	238	6	14	261	19	29	49	17	6	41	11	700
3:15 PM	7	202	19	12	236	25	31	84	15	10	56	12	709
3:30 PM	11	242	9	8	262	18	38	66	25	10	49	22	760
3:45 PM	9	190	8	12	268	27	33	70	18	10	58	25	728
4:00 PM	14	247	3	11	268	33	29	64	22	15	39	17	762
4:15 PM	3	264	2	12	281	31	40	79	14	16	32	14	788
4:30 PM	11	252	8	6	310	29	29	49	12	7	50	15	778
4:45 PM	7	223	5	7	273	34	30	83	14	15	58	13	762
5:00 PM	9	266	3	13	308	27	29	78	11	12	47	15	818
5:15 PM	4	217	4	9	295	37	46	80	13	19	50	27	801
5:30 PM	11	212	7	15	287	32	33	59	11	12	50	14	743
5:45 PM	4	217	5	27	279	30	32	83	11	10	47	17	762
TOTAL VOLUMES :	NL 99	NT 2770	NR 79	SL 146	ST 3328	SR 342	EL 399	ET 844	ER 183	WL 142	WT 577	WR 202	TOTAL 9111
APPROACH %'s :	3.36%	93.96%	2.68%	3.83%	87.21%	8.96%	27.98%	59.19%	12.83%	15.42%	62.65%	21.93%	
PEAK HR START TIME :	430	PM											TOTAL
PEAK HR VOL :	31	958	20	35	1186	127	134	290	50	53	205	70	3159
PEAK HR FACTOR :		0.907			0.968			0.853			0.854		0.965

CONTROL : Signalized

ITM Peak Hour Summary Prepared by:



E/o La Brea Ave and Rancho Cienega Recreation Center Entry , Baldwin Hills





Total Volume Per Leg





APPENDIX B LADOT CMA LEVEL OF SERVICE WORKSHEETS





# S/I	Porth-South Street:	La Brea	Avenue			Year	of Count:	2015	Ambi	ent Grow	th: (%):	1	Conduc	ted by:	KOA C	orp	Date:		2/5/16	
-	East-West Street:	1-10 WB	Off-Ramp			Project	tion Year:	2019		Peal	k Hour:	AM	Reviev	ved by:	CV		Project:	Rancho	Cienega Rec	:. Ctr.
0	No.)pposed Ø'ing: N/S-1, E/W-2 o	of Phases or Both-3?			00			00				00				00				0 0
Rigt	ht Turns: FREE-1, NRTOR-2 (or OLA-3?	NB 0 EB 0	SB WB	00	NB EB	0 SB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00
	ATSAC-1 or ATSAC Override	:+ATCS-2? e Capacity			00	}	•	00	1		1	00	}		1	00			!	00
			EXISTI	NG CONDI	TION	EXISTIN	G PLUS PR	OJECT	FUTURE	: CONDITIO	N W/O PRO	JECT	FUTUR		N W/ PRO.	JECT	FUTURE	W/ PROJEC	T W/ MITIO	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added	Total Volume	No. of Lanes	Lane Volume	Added	Total Volume	No. of Lanes	Lane Volume	Added	Total Volume	No. of Lanes	Lane Volume
a	Left		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NUC			1791	04	448	C	1791	448	34	1898	04	475	C	1898	04	475	C	1898	04	475
нвс	Through-Right			0	-		5	2	5		- 0 -))		- 0 -) -			. 0	2
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ЭНТ			C	0 0	c	c	C	C	C	C	0 0	C	C	c	0 0	C	C	c	0 0	C
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				>							>		l		>	l	l	l		
a	ر Left مطلعه		0	0 0	0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0 0	0
	Through Through		0	000	0	0	0	0	0	0	000	0	0	0	000	0	0	0	000	0
ats A	Right		0	000	0	0	0	0	0	0	000	0	0	0	000	0	0	0	000	0
3	Left-Right			0 0							0				0 0				0 0	
a	feft - 2 = -		0	0 0	0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0 0	0
ΝПС	← Lett-Inrougn ← Through		0	00	0	0	0	0	0	0	00	0	0	0	00	0	0	0	- 0	0
BTB	← Through-Right ~ Right		257	0 0	141	сл С	260	143	0	267	0 0	147	ന	270	0 0	149	0	270	0 0	149
ME	← Left-Through-Right			100		1		2		i	00		I	,	100	2		, I	100	
	CRITICAL	VOLUMES	Nor	th-South: sst-West	532 141	Non	h-South: st-West	534 143		Norti Fa	h-South: st-West	571 147		North	-South: :t-West	573 149		Nort	h-South: st-West	573 149
				SUM:	673	i	SUM:	677		i	SUM:	718			SUM:	722		1	SUM:	722
	VOLUME/CAPACITY (V/	C) RATIO:			0.449			0.451				0.479				0.481				0.481
د.	//C LESS ATSAC/ATCS ADJL	USTMENT:			0.349			0.351				0.379				0.381				0.381
		ICE (FOS):			A			A				A				A				Α
	02	EMARKS:				1											I			
	Version: 11 Beta: 8/4/201	Ŧ		Т×Ц	+ UNITA	PRO.IF	JAMI TC	EC/								AMI TO	FC C			

Δv/c after mitigation: 0.002 Fully mitigated? N/A

Change in v/c due to project: 0.002 Significant impacted? NO

Change in v/c due to project: 0.002

Significant impacted? NO





I/S #:	North-South Street:	La Brea	Avenue			Year	of Count:	2015	Ambi	ent Grow	th: (%):	1	Conduc	ted by:	KOA C	orp	Date:		2/5/16	
-	East-West Street:	1-10 WB (Off-Ramp			Project	ion Year:	2019		Peal	k Hour:	PM	Reviev	ved by:	CV		Project: F	Rancho Ciene	ega Rec. Ctr	
ð	No. c pposed Ø'ing: N/S-1, E/W-2 oi	of Phases			0 0			0 3				0 0				0 0			T	0 0
Righ	t Turns: FREE-1, NRTOR-2 o	r OLA-3?	NB 0 EB 0	SB WB	00	NB EB	0 SB- 0 WB-	••	NB EB	00	SB WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00
	ATSAC-1 or ATSAC-1 Override	-ATCS-2? Capacity			00			00				00				00				00
			EXISTI	VG CONDIT	NOI.	EXISTIN	G PLUS PR(JUECT	FUTURE	: CONDITIO	N W/O PRC	JECT	FUTUR		N W/ PRO	IECT	FUTURE	W/ PROJEC	T W/ MITIO	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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юв	Through		1363	4 0	341	ო	1366	342	64	1482	4 0	371	ო	1485	4 0	371	0	1485	4 0	371
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нти	€ Right		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ios	Left-Through-Right			0 0							0				0				0	
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			NoN	th-South:	555 250	Non	h-South:	556 250		Nort	h-South:	599 272		North	-South:	600 272		Nort	h-South:	600 373
		OLOWES	ŭ	SUM:	914	ŭ	SUM:	915 915		ġ L	SUM:	972		ца Ц	SUM:	573 973		Ľ	st-west:	573 973
	VOLUME/CAPACITY (V/C) RATIO:			0.609			0.610				0.648				0.649				0.649
Ń	C LESS ATSAC/ATCS ADJU	STMENT:			0.509			0.510				0.548				0.549				0.549
	LEVEL OF SERVIC	CE (LOS):			A			A				۷				A				A
	RE	MARKS:																		
	Vorcion: 11 Bota: 8/4/2011			ЦХЦ	STING +	DPO.IF(T IMPA	Ę									ACT 0			

∆v/c after mitigation: 0.001 Fully mitigated? N/A

Change in v/c due to project: 0.001 Significant impacted? NO

Change in v/c due to project: 0.001 Significant impacted? NO





I/S #:	North-South Street:	La Brea	Avenue			Year	of Count:	2015	Ambio	ent Grow	th: (%):	1	Conduc	ted by:	KOAC	torp	Date:		2/5/16	
2	East-West Street:	1-10 EB (Off-Ramp			Projec	tion Year:	2019		Peak	k Hour:	AM	Review	red by:	CV		Project: F	Rancho Ciene	ega Rec. Ctr.	
ð	No. posed Ø'ing: N/S-1, E/W-2 o	of Phases or Both-3?			0 3			2 0				0 5				0 0			Ĩ	0 0
Righ	t Turns: FREE-1, NRTOR-2 (or OLA-3?	NB EB	SB WB	00	NB- EB-	0 SB. WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00
	ATSAC-1 or ATSAC Override	+ATCS-2? • Capacity			0 0			00				00				00				00
			EXIST	ING COND	ITION	EXISTIN	IG PLUS PR	OJECT	FUTURE	CONDITIO	N W/O PRO	JECT	FUTUR	: CONDITIO	N W/ PRO	јест	FUTURE	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane /olume	Added Volume	Total /olume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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	CRITICAL	VOLUMES	NOI	rth-South. ast-West	629	Nor	th-South: set-West"	629 177		North	-South: st-West ⁻	683 169		North	-South: t-West	683 170		Nort	n-South: st-West	683 170
				SUM:	751	ì	SUM:	751		i	SUM:	852		i	SUM:	853			SUM:	853
	VOLUME/CAPACITY (V/	C) RATIO:			0.501			0.501				0.568				0.569				0.569
\$	C LESS ATSAC/ATCS ADJL	JSTMENT:			0.401			0.401				0.468				0.469				0.469
	LEVEL OF SERVI	ICE (LOS):			A			A				A				A				A
	Ϋ́	EMARKS:																		
	Version: 1i Beta: 8/4/201	÷		Ě	ISTING +	- PROJE	CT IMPA	СT							PROJE	CT IMF	ACT			

∆v/c after mitigation: 0.001 Fully mitigated? N/A

Change in v/c due to project: 0.001 Significant impacted? NO

Change in v/c due to project: 0.000 Significant impacted? NO





Ith Street: La Brea Av	enne			Year	of Count:	2015	Amb	ient Grow	rh: (%):	- 1	Conduc	sted by:	KOA	Corp	Date:		2/5/16	
10 EB Off-	-Ramp			Project	ion Year:	2019		Реа	k Hour:	Md	Revier	ved by:	0	>	Project:	Rancho Cier	lega Rec. Cti	æ
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	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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) RATIO:		SUM:	0.401		SUM	0 403			SUM:	/ 51 0 487			SUIVE	/ 34 0 489			SUME	/ 34 0 489
STMENT:			0.301			0.303				0.387				0.389				0.389
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EMARKS:																		
		EXIS	TING +	PROJE	CT IMP/	ACT							PROJI	ECT IMI	PACT			

∆v/c after mitigation: 0.002 Fully mitigated? N/A

Change in v/c due to project: 0.002 Significant impacted? NO

Change in v/c due to project: 0.002 Significant impacted? NO





	3 Each Mark Streek. Among belond Projection of the second of the se	# S/I	North-South Street:	La Brea	Avenue			Year	of Count:	2015	Ambi	ent Grow	rth: (%):	-	Conduc	ted by:	KOA C	orp	Date:		2/5/1	6	
Optimization Model	Optimization Optimization<	3	East-West Street:	Jetterso	n Boulevard			Projec	tion Year:	2019		Реа	K Hour:	AM	Reviev	ved by:	CV		Project: F	Rancho Cien	ega	Rec. Ct	
Right Turner. Fritted. I WATCR of CALARY Mean Mean <th mean<="" th=""> Mean Mean<th>Right Turn: Frie: / Introde Mail <t< th=""><th>ō</th><th>No. of pposed Ø'ing: N/S-1, E/W-2 or l</th><th>Fhases Both-3?</th><th></th><th></th><th>40</th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th></th></t<></th></th>	Mean Mean <th>Right Turn: Frie: / Introde Mail <t< th=""><th>ō</th><th>No. of pposed Ø'ing: N/S-1, E/W-2 or l</th><th>Fhases Both-3?</th><th></th><th></th><th>40</th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th></th></t<></th>	Right Turn: Frie: / Introde Mail Mail <t< th=""><th>ō</th><th>No. of pposed Ø'ing: N/S-1, E/W-2 or l</th><th>Fhases Both-3?</th><th></th><th></th><th>40</th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th>40</th><th></th><th></th><th></th><th></th></t<>	ō	No. of pposed Ø'ing: N/S-1, E/W-2 or l	Fhases Both-3?			40			40				40				40				
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Right r Left-Through-right $Right$ $Right$ $Right$	C Through-Right 68 0 68 0 71 10 71 11 0 71 <th< td=""><th>NNO</th><th>ℓ Left-Through ← Through</th><th></th><td>1154</td><td>⊃ ←</td><td>611</td><td>0</td><td>1154</td><td>611</td><td>81</td><td>1282</td><td>⊃ -</td><td>677</td><td>0</td><td>1282</td><td>o –</td><td>677</td><td>0</td><td>1282</td><td>⊃ ←</td><td></td></th<>	NNO	ℓ Left-Through ← Through		1154	⊃ ←	611	0	1154	611	81	1282	⊃ -	677	0	1282	o –	677	0	1282	⊃ ←		
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VOLUME/CAPACITY (V/C) RATIO: 1.049 1.054 1.150 1.150 V/C LESS ATSAC/ATCS ADJUSTMENT: 0.949 0.954 1.050 1.050 V/C LESE ATSAC/ATCS ADJUSTMENT: E 1.050 1.050 1.050	VOLUME/CAPACITY (V/C) RATIO: 1.049 1.054 1.150 1.150 V/C LESS ATSAC/ATCS ADJUSTMENT: 0.949 0.954 1.050 1.050			Ī		SUM:	1443		SUM:	1449			SUM:	1581			SUM:	1581			SUI	÷	
WC LESS ATSAC/ATCS ADJUSTMENT: 0.949 0.954 1.050 1.050 LEVEL OF SERVICE (LOS): E E F F F	WC LESS ATSAC/ATCS ADJUSTMENT: 0.949 0.954 1.050 1.050 V/C LESS ATSAC/ATCS ADJUSTMENT: E E F F F LEVEL OF SERVICE (LOS): E E F F F F REMARKS: REMARKS: F F F F F F		VOLUME/CAPACITY (V/C)) RATIO:			1.049			1.054				1.150				1.150					
LEVEL OF SERVICE (LOS): E E F	LEVEL OF SERVICE (LOS): E F F F	2	//C LESS ATSAC/ATCS ADJUS	STMENT:			0.949			0.954				1.050				1.050					
	REMARKS:		LEVEL OF SERVICI	E (LOS):			ш			ш				LL.				LL.					

Δv/c after mitigation: 0.000 Fully mitigated? N/A

Change in v/c due to project: 0.000 Significant impacted? NO

Change in v/c due to project: 0.005

Significant impacted? NO





:# S/I	North-South Street:	-a Brea A	venue			Year	of Count:	2015	Ambi	ent Grow	th: (%):	1	Conduc	ted by:	KOA C	orp	Date:		2/5/16	
3	East-West Street: J	lefferson	Boulevard		-	Project	ion Year:	2019		Peal	K Hour:	PM	Reviev	/ed by:	CV		Project: R	tancho Ciene	ega Rec. Ctr.	
Ö	No. of P posed Ø'ina: N/S-1. E/W-2 or Bo	phases			4 C			4 C				4 C				4 C				4 C
Riah	t Turns: FREE-1. NRTOR-2 or O	0LA-37	NB 0	SB	0	NB	0 SB-	,	NB	0	SB	0	NB	0	SB	0	NB	0	SB	0
,	ATSAC-1 or ATSAC+AT	CS-22	EB 3	WB	0 0	EB	3 WB		EB	ო	WB	0 0	EB	ო	WB	0 0	EB	ო	WB	0 0
	Override Ca	apacity			10			0				0				0				0
			EXISTI	NG CONDIT	NOI	EXISTIN	G PLUS PR	OJECT	FUTURE	CONDITIO	N W/O PRO	JECT	FUTURI	CONDITIC	N W/ PRO	IECT	FUTURE	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT	1	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added	Total /olume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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c	ر Left د ت		51	← (51	0	51	51	0	53	÷ (53	0	53	 .	53	0	53		53
INNO	→ Lenr-Inrougn → Through		585	n c	293	0	585	293	66	708	n c	354	0	708	2 (1)	354	0	708	0 N	354
гвс	Through-Right			0							0				0				0	
IS A 3	Right		418	- 0	239	0	418	237	0	435	- 0	249	0	435	- 0	247	0	435	- 0	247
	🙏 Left-Right			0		1	1		1	1	0	1	1	1	0	1	1	1	0	
c	ر Left	Γ	437	-	437	0	437	437	0	455	-	455	0	455	-	455	0	455	-	455
	↓ Left-Through ← Through		516	⊃ ←	284	0	516	284	122	659	o -	356	0	659	o -	356	0	659	o -	356
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	CRITICAL VOL	.UMES	ч Ч Ч	th-South: ast-West: sum-	741 730 1471	Nort Ea	h-South: st-West: sum-	743 730 1473		Nort	-South: st-West: sum-	824 809 1633		North Eas	-South: :t-West sum-	826 809 1635		Nort	-South: st-West: cum-	826 809 1635
	VOLUME/CAPACITY (V/C) R	RATIO:			1.070			1.071				1.188				1.189				1.189
Ň	C LESS ATSAC/ATCS ADJUST	MENT:			0.970			0.971				1.088				1.089				1.089
	LEVEL OF SERVICE	(ros):			ш			Е				u.				F				u.
	KEN	ARKS:																		
	Version: 1i Beta; 8/4/2011			EXI	STING +	PROJEC	CT IMPA	CT							PROJE	CT IMP	ACT			

∆v/c after mitigation: 0.001 Fully mitigated? N/A

Change in v/c due to project: 0.001 Significant impacted? NO

Change in v/c due to project: 0.001 Significant impacted? NO





#	North-South Street: East-West Street:	La Brea Rodeo R	Avenue oad			Year Projec	of Count: tion Year:	2015 2019	Ambi	ent Grow Pea	th: (%): k Hour:	1 AM	Conduc Reviev	sted by: wed by:	KOA (corp /	Date: Project: F	Rancho Cien	2/5/16 ega Rec. Ctr	
ă	No. (sed Ø'ing: N/S-1, E/W-2 o	of Phases vr Both-3?			0 2			5			ł	n o				50				s o
. -	urns: FREE-1, NRTOR-2 o	or OLA-3?	NB 0 EB	SB WB	ოო	NB EB	0 SB 0 WB	ი ო 	NB EB	00	SB WB	ოო	NB EB	00	SB WB	ოო	NB EB	00	SB WB	ოო
	ATSAC-1 or ATSAC- Override	+ATCS-2? Capacity			00			0 0				00				00				0 0
1			EXIST	NG COND	ITION	EXISTI	NG PLUS PR	OJECT	FUTUR		N W/O PRO	JECT	FUTUR	E CONDITIO	ON W/ PRO	JECT	FUTURE	W/ PROJE	CT W/ MITIG	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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	🔶 Left-Through			0							0		1		0				0	
	↑ Through ◆ Through		1827	м т	616	2	1829	616	0	1901	N +	641	N	1903	N +	641	0	1903	N 7	641
			20	- 0	20	0	20	20	0	21	- 0	21	0	21	- 0	21	0	21	- 0	21
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	↓ Through		1360	ი ი	453	0	1360	453	0	1415	ი	472	0	1415	ი	472	0	1415	2 (1)	708
	🙏 Through-Right			0							0				0				0	
	ر Right المراجع المراجع		250	c	64	0	250	62	0	260	c	66	0	260	- c	64	0	260	- c	64
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	ر Left : :		186	~ (186	0	188	188	0	194	 (194	0	196	 (196	0	196		196
	↓ Left-Ihrough		452		171	C	452	171	104	574	- n	213	C	574	-	213	C	574	-	213
	Through-Right		101	1 -	-	>	124	-		r õ	1 -	<u>1</u>	>	5	1 -	1	>	F	1 -	4
	Right		62	0	62	0	62	62	0	65	0	65	0	65	0	65	0	65	0	65
	Left-Through-Right			0 0							0 0				0 0				0 0	
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	Left-Through-Right			00							00				00					
			Nor	th-South:	861	IoN	th-South:	862		Nort	h-South:	1026		Norti	h-South:	1027		Nort	h-South:	1027
			4	ast-west SUM:	014	4	ast-west: SUM:	010 1678		La	st-west: SUM:	002 1908		Ľ	st-west SUM:	004 1911		Ľa	st-west: SUM:	004 1911
	VOLUME/CAPACITY (V/	C) RATIO:			1.218			1.220				1.388				1.390				1.390
	LESS ATSAC/ATCS ADJU	ISTMENT:			1.118			1.120				1.288				1.290				1.290
	LEVEL OF SERVIN	CE (LOS):			H.			F				L.				F				H
1	R	EMARKS:																		
>	'ersion: 1i Beta; 8/4/2011	-		Ш		+ PROJE	CT IMP/	<u>ACT</u>							PROJE	ECT IMF	PACT			

AV/c after mitigation: 0.002 Fully mitigated? N/A

Change in v/c due to project: 0.002 Significant impacted? NO

Change in v/c due to project: 0.002 Significant impacted? NO





5#: No	r	Opposed	Right Turns					ſ			<u>₹</u> ₹	+} 0n		גנ מח		анті 1,	+ - 10s	₹	ر ب بر	111 NПО	8T8, •••	₩∃	۰ ل <u>۰</u>	аиг	- - 10ਬ.	ves.	بلہ ۱		0 N	V/C LES	
th-South Street: La ast-West Street: Roc	1011 - 1021 - 11 COL	No. of Pha 3'ing: N/S-1, E/W-2 or Both	FREE-1, NRTOR-2 or OLA	ATSAC-1 or ATSAC+ATCS	AISAC-1 01 AISACTALC		MOVEMENT	Left	Left-Through	Through Through Bicht	riiiouyii-kuyiit Right	Left-Through-Right Left-Right		Left Left-Through	Through	Through-Right Right	Left-Through-Right 1 off-Diaht		Left Left Through	Through	Through-Right Right	Left-Through-Right Left-Right	Left	Left-Through	I nrougn Through-Right	Right Left-Through-Right	Left-Right	CRITICAL VOLUN	UME/CAPACITY (V/C) RA	ATSAC/ATCS ADJUSTME	LEVEL OF SERVICE (L(
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enu			•	>		EXISTING	amil	10		1652	59			291	1896	204			241	1124	55		185	c c	220 2	324		North			
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Dient Gro			0 0			RE CONDIT	Total Volume	104		1719	61			463	1973	212			251	1298	57		193	000	789	496		NO.			
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Date: Project:	LI NIACL		NB	191		FUTURE	Added Volume	0		0	0			0	0	0			0	0	0		0	c	∍	0					
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		ပဂ	<i>с</i> го с	<u> у с</u>	0 7	GATION	Lane	104		593	61			464	186	0			251	452	57		195		547 1	33		1091 647 1738	1.264	1.164	LL.

∆v/c after mitigation: 0.027 Fully mitigated? N/A

Change in v/c due to project: 0.002 Significant impacted? NO

Change in v/c due to project: 0.002 Significant impacted? NO





# S/I	North-South Street:	MLK, Jr.	Boulevard			Year	of Count:	2015	Ambi	lent Grow	th: (%):	4	Conduc	ted by:	KOA C	Corp	Date:		2/5/16	
5	East-West Street:	Rodeo R	oad			Projec	tion Year:	2019		Peal	k Hour:	AM	Reviev	ved by:	CV	1	Project: F	Rancho Ciene	ga Rec. Ctr.	
C	No.	of Phases vr Both-32			RC			2 0				2 19			Ĩ	80			T	2 10
	ht Turne: EBEE-4 NDTOP-3 o	V. O. A. 32	NB 0	SB	00	NB	0 SB	00	NB	0	SB	00	NB	0	SB	00	NB	0	SB	00
ĥ	IIL LUIIS. FREE-1, NR I OR-2 L		EB 3	WB	0	EB	3 WB	0	EB	e	WB	0	EB	e	WB	0	EB	e	WB	0
	ATSAC-1 or ATSAC Override	+ATCS-2?			00			00				0 0				00				00
			EXISTI	NG CONDI	TION	EXISTIN	IG PLUS PR	OJECT	FUTURE	E CONDITIO	N W/O PRC	DJECT	FUTUR	E CONDITIC	ON W/ PRO	JECT	FUTURE	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT	_	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added	Total Volume	No. of Lanes	Lane	Added Volume	Total Volume	No. of Lanes	Lane Volume
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8T8	 Inrougn-kight Right 		422		0	0	422	0	234	673		0	0	673		0	0	673		0
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			Nor	th-South:	482	Nor	th-South:	485		Nort	h-South:	555		North	-South:	558		Nort	-South:	558 222
	CKIIICAL		ų	ast-west SUM:	515 797	ű.	ast-west: SUM:	321 806		Ea	IST-WEST: SUM:	655 890		Eas	st-West SUM:	336 894		Ea	st-west: SUM:	336 894
	VOLUME/CAPACITY (V/	C) RATIO:			0.531			0.537				0.593				0.596				0.596
د.	//C LESS ATSAC/ATCS ADJU	JSTMENT:			0.431			0.437				0.493				0.496				0.496
	LEVEL OF SERVI	ICE (LOS):			A			Α				A				A				A
	R	EMARKS:																		
	Version: 1i Beta: 8/4/201	-		ËX	ISTING +	+ PROJE	CT IMP/	νcτ							PROJE	ECT IMF	PACT			

Av/c after mitigation: 0.003 Fully mitigated? N/A

Change in v/c due to project: 0.003 Significant impacted? NO

Change in v/c due to project: 0.006 Significant impacted? NO





# S/I	: North-South Street:	MLK, Jr.	Boulevard			Year	of Count:	2015	Ambi	lent Grow	th: (%):	4	Conduc	ted by:	KOA C	Corp	Date:		2/5/16	
5	East-West Street:	Rodeo R	oad			Projec	tion Year:	2019		Pea	k Hour:	PM	Reviev	ved by:	CV	1	Project: F	Rancho Ciene	ga Rec. Ctr.	
C	No. 0	f Phases			20			2 0				N C			Ĩ	20				2 10
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	ATSAC-1 or ATSAC+, Override (ATCS-2? Capacity			00			00				00				00				00
			EXISTI	NG CONDI	TION	EXISTIN	IG PLUS PR	OJECT	FUTURE		N W/O PRC	JECT	FUTUR		ON W/ PRO	JECT	FUTURE	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane	Added Volume	Total Volume	No. of Lanes	Lane Volume
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	VOLUME/CAPACITY (V/C)) RATIO:			0.541			0.542				0.631				0.631				0.631
د	//C LESS ATSAC/ATCS ADJUS	STMENT:			0.441			0.442				0.531				0.531				0.531
	LEVEL OF SERVIC	:E (LOS):			A			Α				Α				Α				Α
	RE	MARKS:																		
	Version: 1i Beta: 8/4/2011			ËX	ISTING +	- PROJE	CT IMP/	νcτ							PROJE	ECT IMF	PACT			

∆v/c after mitigation: 0.000 Fully mitigated? N/A

Change in v/c due to project: 0.000 Significant impacted? NO

Change in v/c due to project: 0.001 Significant impacted? NO





I/S #:	North-South Street: Farme	dale Avenu	9			Year o	f Count:	2015	Amb	ient Grow	/th: (%):	1	Conduc	sted by:	KOA (Corp	Date:		2/5/16	
9	East-West Street: Rodet	o Road				Projecti	on Year:	2019		Pea	ik Hour:	AM	Revier	ved by:	C	1	Project: F	Rancho Cien	ega Rec. Ctr.	
đ	No. of Phase pposed Ø'ing: N/S-1, E/W-2 or Both-3'	S. C.			ω +			3				ς, +			Ĩ	c0 +			Ĩ	ω +
Righ	t Turns: FREE-1, NRTOR-2 or OLA-3	? NB EB	0 SE	44	00	NB EB	0 SB- 0 WB	•••	NB EB	00	SB WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00
	ATSAC-1 or ATSAC+ATCS-2 Override Capacit	<u>s: 2</u>			00			0 7 0				00				00				00
		Ĕ	ISTING C			EXISTING	PLUS PR	OJECT	FUTUR		ON W/O PRO	DJECT	FUTUR	E CONDITIO	ON W/ PRO	JECT	FUTURE	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT	Volum	e Lar	of La les Volu	ume F	roject raffic V	Total	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
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			s	CIN:	801		SUM:	808			SUM:	833			SUM:	842			SUM:	842
	VOLUME/CAPACITY (V/C) RATIC			0.5	562			0.568				0.585				0.591				0.591
>	/C Less Atsac/Atcs Adjustment Level de servige 4 ds/			0.0	462			0.468				0.485				0.491				0.491
					A			A				A				A				А
	KENARKS																			
	Version: 1i Beta; 8/4/2011			EXISTI	1 + DN	ROJEC	T IMPA	티							PROJ	ECT IMF	PACT			

∆v/c after mitigation: 0.006 Fully mitigated? N/A

Change in v/c due to project: 0.006 Significant impacted? NO

Change in v/c due to project: 0.006 Significant impacted? NO





I/S #:	North-South Street:	Farmdal	Avenue			Year	of Count:	2015	Ambi	ent Grow	:h: (%):	-	Conduc	ted by:	KOA C	orp	Date:		2/5/16	
9	East-West Street:	Rodeo R	bad			Projec	tion Year:	2019		Pear	(Hour:	Md	Reviev	ved by:	CV		Project: R	tancho Ciene	ga Rec. Ctr.	
ō	No. (posed Ø'ing: N/S-1, E/W-2 of	f Phases r Both-3?			ლ –			c∩ +-				ლ –				c∩ +-				⇔ +
Right	Turns: FREE-1, NRTOR-2 o	r OLA-3?	NB 0 EB 0	SB WB	00	NB EB	0 SB 0 WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00	NB EB	00	SB WB	00
	ATSAC-1 or ATSAC-1 Override	ATCS-2? Capacity			00			0 0				00				00				00
			EXISTI	NG COND	TION	EXISTI	IG PLUS PR	OJECT	FUTURE	CONDITIO	N W/O PRO	JECT	FUTUR		N W/ PRO.	ECT	FUTURE \	W/ PROJEC	T W/ MITIG	ATION
	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane /olume	Added Volume	Total Volume	No. of Lanes	Lane /	Added /olume	Total Volume	No. of Lanes	Lane Volume
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	VOLUME/CAPACITY (V/C) RATIO:			0.581			0.585				0.604				0.608				0.608
ž	C LESS ATSAC/ATCS ADJU	STMENT:			0.481			0.485				0.504				0.508				0.508
	LEVEL OF SERVIC	:E (LOS):			A			A				A				A				A
	RE	MARKS:																		
	Version: 1i Beta; 8/4/2011			ШX		+ PROJE	CT IMP/	CT							PROJE	CT IMP	ACT			

∆v/c after mitigation: 0.004 Fully mitigated? N/A

Change in v/c due to project: 0.004 Significant impacted? NO

Change in v/c due to project: 0.004 Significant impacted? NO





:# S/I	North-South Street:	Crensha	v Boulevar	5		Year (of Count:	2015	Ambi	ent Grow	th: (%):	-	Conduct	ted by:	KOAC	orp	Date:		2/5/16	
7	East-West Street:	Rodeo R	oad			Project	ion Year:	2019		Peal	k Hour:	AM	Review	/ed by:	CV		Project:	Rancho	Cienega Rec	. Ctr.
ő	No. c posed Ø'ing: N/S-1, E/W-2 or	of Phases			0 0			0 0				0 0				0 0				00
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	ATSAC-1 or ATSAC+ Override	ATCS-2? Capacity			00			00				00				00				00
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	MOVEMENT		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane /	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane /olume
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	VOLUME/CAPACITY (V/C) RATIO:			0.623			0.625				0.791				0.792				1.358
Ň	C LESS ATSAC/ATCS ADJU	STMENT:			0.523			0.525				0.691				0.692				1.258
	LEVEL OF SERVIC	CE (LOS):			A			A				B				m				u.
	RE	MARKS:																		
	Version: 1i Beta; 8/4/2011			EXI	STING +	PROJEC	T IMPA	딩							PROJE	CT IMP	ACT			

∆v/c after mitigation: 0.567 Fully mitigated? N/A

Change in v/c due to project: 0.001 Significant impacted? NO

Change in v/c due to project: 0.002 Significant impacted? NO





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∆v/c after mitigation: 0.523 Fully mitigated? N/A

Change in v/c due to project: 0.003 Significant impacted? NO

Change in v/c due to project: 0.004 Significant impacted? NO



APPENDIX C DRIVEWAY TRAFFIC IMPACT WORKSHEETS

Intersection

Int Delay, s/veh

Movement EBL EBT WBT WBR SBL SBR Traffic Vol, veh/h 0 705 2007 20 0 12
Traffic Vol, veh/h 0 705 2007 20 0 12
Future Vol, veh/h 0 705 2007 20 0 12
Conflicting Peds, #/hr 0 0 0 0 0 0
Sign Control Free Free Free Stop Stop
RT Channelized - None - None - None
Storage Length 0 0 -
Veh in Median Storage, # - 0 0 - 0 -
Grade, % - 0 0 - 0 -
Peak Hour Factor 92 92 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2 2
Mvmt Flow 0 766 2182 22 0 13

Major/Minor	Major1			Ν	lajor2		Minor2		
Conflicting Flow All	2203	0			-	0	2499	1102	
Stage 1	-	-			-	-	2192	-	
Stage 2	-	-			-	-	307	-	
Critical Hdwy	5.34	-			-	-	5.74	7.14	
Critical Hdwy Stg 1	-	-			-	-	6.64	-	
Critical Hdwy Stg 2	-	-			-	-	6.04	-	
Follow-up Hdwy	3.12	-			-	-	3.82	3.92	
Pot Cap-1 Maneuver	99	-			-	-	50	177	
Stage 1	-	-			-	-	43	-	
Stage 2	-	-			-	-	660	-	
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	99	-			-	-	50	177	
Mov Cap-2 Maneuver	-	-			-	-	39	-	
Stage 1	-	-			-	-	43	-	
Stage 2	-	-			-	-	660	-	
Approach	EB				WB		SB		
HCM Control Delay, s	0				0		27		
HCM LOS	-				-		D		
							_		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR SBLn1					
Capacity (veh/h)	99	-	-	- 177					
HCM Lane V/C Ratio	-	-	-	- 0.074					
HCM Control Delay (s)	0	-	-	- 27					
HCM Lane LOS	А	-	-	- D					

0.2

0

HCM 95th %tile Q(veh)

Intersection

Int Delay, s/veh

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	0	1588	1127	101	0	49
Future Vol, veh/h	0	1588	1127	101	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1726	1225	110	0	53

Major/Minor	Major1		1	Major2		Minor2		
Conflicting Flow All	1335	0		-	0	1970	667	_
Stage 1	-	-		-	-	1280	-	
Stage 2	-	-		-	-	690	-	
Critical Hdwy	5.34	-		-	-	5.74	7.14	
Critical Hdwy Stg 1	-	-		-	-	6.64	-	
Critical Hdwy Stg 2	-	-		-	-	6.04	-	
Follow-up Hdwy	3.12	-		-	-	3.82	3.92	
Pot Cap-1 Maneuver	269	-		-	-	97	344	
Stage 1	-	-		-	-	163	-	
Stage 2	-	-		-	-	418	-	
Platoon blocked, %		-		-	-			
Mov Cap-1 Maneuver	269	-		-	-	97	344	
Mov Cap-2 Maneuver	-	-		-	-	139	-	
Stage 1	-	-		-	-	163	-	
Stage 2	-	-		-	-	418	-	
Approach	EB			WB		SB		
HCM Control Delay, s	0			0		17.4		
HCM LOS						С		
Minor Lane/Major Mvmt	EBL	EBT	WBT WBR SBLn1					
Capacity (veh/h)	269	-	344					
HCM Lane V/C Ratio		-	0 155					

	207	-	-	- 544
HCM Lane V/C Ratio	-	-	-	- 0.155
HCM Control Delay (s)	0	-	-	- 17.4
HCM Lane LOS	А	-	-	- C
HCM 95th %tile Q(veh)	0	-	-	- 0.5

Intersection

Int Delay, s/veh

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	0	967	2241	20	0	12
Future Vol, veh/h	0	967	2241	20	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1051	2436	22	0	13

Major/Minor	Major1			N	lajor2		Minor2		
Conflicting Flow All	2458	0			-	0	2867	1229	
Stage 1	-	-			-	-	2447	-	
Stage 2	-	-			-	-	420	-	
Critical Hdwy	5.34	-			-	-	5.74	7.14	
Critical Hdwy Stg 1	-	-			-	-	6.64	-	
Critical Hdwy Stg 2	-	-			-	-	6.04	-	
Follow-up Hdwy	3.12	-			-	-	3.82	3.92	
Pot Cap-1 Maneuver	73	-			-	-	31	146	
Stage 1	-	-			-	-	29	-	
Stage 2	-	-			-	-	577	-	
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	73	-			-	-	31	146	
Mov Cap-2 Maneuver	-	-			-	-	26	-	
Stage 1	-	-			-	-	29	-	
Stage 2	-	-			-	-	577	-	
Approach	EB				WB		SB		
HCM Control Delay, s	0				0		32.1		
HCM LOS							D		
Minor Lane/Major Mymt	FBI	FBT	WBT	WBR SBI n1					
Canacity (veh/h)	73		-	- 146					
HCM Lane V/C Ratio	-		_	- 0.089					
HCM Control Delay (s)	0	-	-	- 32.1					

 HCM Control Delay (s)
 0
 32.1

 HCM Lane LOS
 A
 D

 HCM 95th %tile Q(veh)
 0
 0.3

Intersection

Int Delay, s/veh

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	0	1941	1460	101	0	49
Future Vol, veh/h	0	1941	1460	101	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2110	1587	110	0	53

Major/Minor	Major1			N	/lajor2		Minor2		
Conflicting Flow All	1697	0			-	0	2486	848	
Stage 1	-	-			-	-	1642	-	
Stage 2	-	-			-	-	844	-	
Critical Hdwy	5.34	-			-	-	5.74	7.14	
Critical Hdwy Stg 1	-	-			-	-	6.64	-	
Critical Hdwy Stg 2	-	-			-	-	6.04	-	
Follow-up Hdwy	3.12	-			-	-	3.82	3.92	
Pot Cap-1 Maneuver	178	-			-	-	51	262	
Stage 1	-	-			-	-	96	-	
Stage 2	-	-			-	-	346	-	
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	178	-			-	-	51	262	
Mov Cap-2 Maneuver	-	-			-	-	82	-	
Stage 1	-	-			-	-	96	-	
Stage 2	-	-			-	-	346	-	
Approach	EB				WB		SB		
HCM Control Delay, s	0				0		22.2		
HCM LOS							С		
Minor Lane/Major Mymt	FRI	FRT	W/RT	WRR SRI n1					
Capacity (voh/h)	170	LDI		262					
HCM Lano V/C Datio	170	-	-	- 202					
HCM Control Doloy (c)	-	-	-	- U.2U3					
ncivi contitor Delay (S)	0	-	-	- ZZ.Z					

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HCM Lane LOS

HCM 95th %tile Q(veh)



Department of Recreation and Parks



City of Los Angeles



Bureau of Engineering Environmental Management Group

MITIGATION MONITORING PROGRAM

For

RANCHO CIENEGA SPORTS COMPLEX

SCH No. 2016031012

W.O. E1907694

PREPARED BY CITY OF LOS ANGELES BUREAU OF ENGINEERING

MAY 2016

Mitigation Monitoring Program:

The California Environmental Quality Act (CEQA) requires public agencies to adopt a reporting or monitoring program for the changes to the project that have been adopted to mitigate or avoid significant effects on the environment (Public Resources Code Section 21081.6). The program must be adopted by the public agency at the time findings are made regarding the project. The State CEQA Guidelines allow public agencies to choose whether its program will monitor mitigation, report on mitigation, or both (14 CCR Section 15097(c)). This mitigation monitoring program contains the elements required by CEQA for the Rancho Cienega Sports Complex Project.

A. Location

The project site is located at 5001 Rodeo Road in the West Adams-Baldwin Hills-Leimert Community of the City of Los Angeles. The project site is bounded by the Los Angeles County Metropolitan Transportation Authority (Metro) Expo Line light rail transit system to the north (along Exposition Boulevard), Dorsey High School to the east, residential land uses to the south across Rodeo Road, and commercial uses to the west. Regional access to the project area is provided via Interstate 10 and Interstate 405. The area surrounding the project site is fully developed and highly urbanized, and characterized by single and multiple family residences, industrial uses, commercial uses, and public facilities.

B. Purpose

The overall purpose for the proposed project is to construct a community sports complex to better meet the community's recreational needs. The existing sports complex is insufficient to handle the current park programs due to its size and infrastructure. The gymnasium's aging infrastructure has become a maintenance concern. Additionally, the existing indoor pool (Celes King III Pool) no longer meets the standards for competition pools. The need for a fitness annex and multipurpose room has been made evident by the community's use of the existing childcare facility to accommodate those functions.

The objectives of the proposed project are:

- To provide a sports complex that includes a variety of recreational amenities that meet the needs of the surrounding community, as well as the energy conservation and sustainable design goals of the City.
- To provide modernized and improved facilities at the sports complex to better meet the park programs.
- To upgrade the aging infrastructure of the existing park in order to improve operational and maintenance functions.

C. Description

The proposed project would be implemented in two phases. The components proposed to be implemented in each phase are described below. The proposed project would be designed and constructed to meet LEED Silver designation.

Phase 1

Phase 1 would include demolition of existing facilities, hazardous materials abatement, grading, pile installation, foundation construction, utility installations, building construction, parking lot grading, and landscape and site improvements. Phase 1 activities would occur in the south central portion of the project site and include the

following:

- **Indoor Gymnasium**: Demolition of the existing gymnasium and construction of a new, approximately 24,000-square-foot indoor gymnasium east of the Jackie Robinson Stadium and north of the primary parking lot. The proposed indoor gymnasium would include office space, a running path, and a lookout deck on the mezzanine level, and a second floor walkway that would connect the proposed indoor gymnasium to the proposed indoor pool.
- Indoor Pool and Multiuse Building: Demolition of the existing restroom facilities and construction of a new, approximately 25,000-square-foot indoor pool and bathhouse facility in the central portion of the property adjacent to the existing childcare center and north of the proposed primary parking area. The new indoor pool facility would include a bathhouse, restrooms, lockers, and changing rooms on the ground floor, and a community room, fitness annex, and kitchen on the mezzanine level.
- **Tennis Shop/Overlook**: Demolition of the existing tennis shop located directly north of the Celes King III Pool, and construction of a new 1,900-square-foot tennis shop and restroom facility to the west of and adjacent to the existing tennis courts, and east of the existing childcare center. A new overlook would be constructed on the mezzanine level to provide a viewing area of the tennis courts.
- Stadium Overlook/Concession Stand: Construction of a new stadium overlook and concession stand east of and adjacent to the existing stadium. The facility would include a include a concession stand, restrooms, and a ticket office on the ground level, and a stadium overlook on the mezzanine level, totaling approximately 4,000 square feet.
- **Playground**: Demolition of the existing playground located between the existing childcare center and tennis courts, in order to accommodate the new tennis shop and restroom facility. A new playground would be constructed directly west of the proposed tennis shop.
- **Primary Parking Lot:** Grading of the existing parking lot located along Rodeo Road and driveway improvements.

Phase 2

Phase 2 would include demolition of the concrete surrounding the existing RAP maintenance building, hazardous materials abatement, grading for the parking lot and other site improvements, utility adjustments and upgrades, renovation of the existing maintenance yard and various site improvements, and installation of landscaping and hardscaping. The majority of the Phase 2 activities would occur in the western and northwestern portion of the project site, with some landscaping, storm drainage, and security lighting installed in the eastern portion of the project site. The Phase 2 components include the following:

- **RAP Maintenance Yard and Refuse Collection Center**: Rehabilitation of the existing RAP maintenance building and relocation of the RAP maintenance yard adjacent to the northwest corner of the Jackie Robinson Stadium. A new maintenance yard and refuse collection center would be constructed adjacent to the rehabilitated RAP maintenance building.
- **Northwestern Driveway**: Construction of a new driveway at the northwestern boundary of the project site. The driveway would extend towards Exposition Boulevard that currently ends at the parking lot on the northwestern part of the property.
- **Controlled Driveway**: Construction of a new controlled driveway at the southwest corner of the project site near the Jackie Robinson Stadium. The driveway would allow only right-in/right-out access from Rodeo Road when additional parking is required for special events or community programs. Bollards would be located at the driveway to prohibit access during normal operations.
- Off-street Parking: Installation of off-street parking along the western boundary of the project site, adjacent to the Jackie Robinson Stadium. Additional off-street parking would be installed along the northwestern boundary of the project site, adjacent to the new driveway and Metro Expo Rail Line. With installation of off-street parking, the overall number of parking spaces available in the park would remain the same as existing conditions (411 spaces) but would be reconfigured to allow for landscaping and parking lot improvements.
- **Overflow Parking/Multipurpose Field**: Alteration of the existing parking lot in the northwestern portion of the project site to a new multipurpose field and overflow parking area. Based on scheduling, the overflow parking area could be used as a multipurpose field for sporting events or for overflow parking. When used for parking, an additional 88 spaces would be available to park patrons, for a total of 499 parking spaces in the overall park.
- **Community Garden:** Construction of a one-acre community garden in the northwestern portion of the project site, north of Jackie Robinson Stadium and adjacent to the proposed overflow parking/multipurpose field.

The analysis in this document assumes that, unless otherwise stated, the project will be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards including but not limited to:

Los Angeles Municipal Code (Reference 21) Bureau of Engineering Standard Plans (Reference 28) Standard Specifications for Public Works Construction (Reference 27) Work Area Traffic Control Handbook (Reference 2) Additions and Amendments to the Standard Specifications for Public Works Construction (Reference 1) Bureau of Engineering – Manual, Part M Construction (12-87) (Specifically M 100 Utility Coordination – Utility Coordination Responsibilities – Responsibilities of the Designers (Project Engineer))

	DES	SIGN PHASE		,	
Impact	Mitigation Measure	Implementation Responsibility	Implementation Vehicle	Entorcement Responsibility	Record of Implementati
GEOLOGY AND SOILS					
Impacts related to	GEO-1: The proposed project grading and	Project	Project Plans and	Project Manager	Project Plans a
seismic-related	foundation plans and specifications shall	Engineer	Specifications		Specification:
ground failure and	implement the recommendations presented in				
liquefaction during	the Geotechnical Engineering Report Rancho				
construction.	Cienega Sports Complex prepared by the				
	Department of Public Works, Bureau of				
	Engineering, Geotechnical Engineering				
	Group. The proposed project plans and				
	specifications shall also be reviewed by the				
	Geotechnical Engineering Group to ensure				
	proper implementation and application of the				
	recommendations.				

	Record of Implementation		Bureau of Contract Administration Records	Bureau of Contract Administration Records		Bureau of Contract Administration Records
	Enforcement Responsibility		Bureau of Contract Administration	Bureau of Contract Administration		Bureau of Contract Administration
	Implementation Vehicle		Contract Contract	Construction Contract		Contract Contract
UCTION PHASE	Implementation Responsibility		Contractor	Construction Contractor		Contractor
CONSTR	Mitigation Measure		AQ-1: The construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.	AQ-2: The construction contractor shall implement activity management (e.g. rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts) to the greatest extent possible.	ICES	 BIO-1: Exterior building improvements shall occur outside of the nesting season (February 15 through September 15). If avoidance of exterior construction work within this time period is not feasible, the following additional measures shall be employed: 1. A pre-construction nesting survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.
	Impact	AIR QUALITY	Impacts to air quality during construction.		BIOLOGICAL RESOUR	Disturbance of existing biological resources, flora, fauna, and/or habitat.

Impact	Mitigation Measure 2. If construction activities must occur within 300 feet of an active nest of any passerine bird or within 500 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a weekly basis and the construction activity shall be postponed until the	Responsibility	Implementation Vehicle	Enforcement Responsibility	Record of Implementation
	biologist determines that the nest is no longer active. If the recommended nest avoidance zone is not feasible, the qualified biologist shall determine whether an exception is possible and obtain concurrence from the appropriate resource agency before construction work can resume within the avoidance buffer zone. All work shall cease within the avoidance buffer zone until either agency concurrence is obtained or the biologist determines that the adults and young are no longer reliant on the				

	Record of Implementation		Final Monitoring Report Submitted to South Coast Information Center (SCCIC)	Bureau of Contract Administration Records	Final Monitoring Report Submitted to the Los Angeles County Natural History Museum
	Enforcement Responsibility		Project Manager	Bureau of Contract Administration	Project Manager
	Implementation Vehicle		Project Plans and Specifications	Contract Contract	Project Plans and Specifications
UCTION PHASE	Implementation Responsibility		Project Engineer	Contractor Contractor	Project Engineer
CONSTR	Mitigation Measure	S	CULT-1: Archaeological monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full time. The archaeological monitor will have the authority to redirect construction equipment in the event potential archaeological resources are encountered. If archaeological resources are encountered, work in the vicinity of the discovery will halt until appropriate treatment or further investigation of the resource is determined by a qualified archaeologist in accordance with the provisions of CEQA Guidelines Section 15064.5. In addition, it is recommended that	training on possible archaeological resources that may be present in the area in order to establish an understanding of what to look for during ground-disturbing activities. If Native American cultural materials are encountered during project-related ground disturbance, a trained Native American consultant should be engaged to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would be intended to ensure that Native American concerns are taken into account during the construction process.	CULT-2: Excavations into undisturbed older Quaternary layers, which vary in depth within the project site, shall be monitored. Monitoring will consist of spot checking until native soils are observed, at which time monitoring will be conducted full-time. In the
	Impact	CULTURAL RESOURCE	Potential to impact archaeological resources.		Potential to impact paleontological resources.

	Record of Implementation	Bureau of Contract Administration Records	Final Monitoring Report Submitted to South Coast Information Center (SCCIC)	Bureau of Contract Administration Records		Bureau of
	Enforcement Responsibility	Bureau of Contract Administration	Project Manager	Bureau of Contract Administration		Bureau of
	Implementation Vehicle	Contract Contract	Project Plans and Specifications	Contract Contract		Construction
NUCTION PHASE	Implementation Responsibility	Construction Contractor	Project Engineer	Contractor Contractor		Construction
CONSTR	Mitigation Measure	event that potential paleontological resources are encountered, a qualified paleontologist should be retained to recover and record any fossil remains discovered. Any fossils, should they be recovered, shall be prepared, identified, and catalogued before curation in an accredited repository designated by the lead agency.	CULT-3: In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found during construction activities, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner	determines that the remains are of believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.		GEO-2: All grading, excavation, and
	Impact		Potential to impact human remains.		GEOLOGY AND SOILS	Impacts related to

	Record of Implementation	Contract Administration Records														Bureau of Contract	Administration	Records			
	Enforcement Responsibility	Contract Administration														Bureau of Contract	Administration				
	Implementation Vehicle	Contract														Construction Contract					
UCTION PHASE	Implementation Responsibility	Contractor														Construction Contractor					
CONSTR	Mitigation Measure	construction of foundations should be performed under the observation and testing of the Geotechnical Engineer during the following stages:	 Demolition; 	 Pile indicator program; 	 Pile loading testing; 	Completion of site clearing;	 Site and pool excavation; 	 Installation of shoring; 	 Production pile installation; 	 Subgrade preparation; 	 Fill placement; 	Construction of structural mat foundations for accessory structures;	 Excavation and backfilling of all utility trenching; and 	 When any unusual or unexpected geotechnical conditions are encountered. 	DOUS MATERIALS	HAZ-1: Prior to demolition of existing structures. a demolition-level asbestos	survey shall be conducted at the project site	to identify asbestos-containing materials	asbestos abatement contractor shall be	retained to remove all ACMs and abate the	אווווואס ווו הטווואוומווהב אוווו וווב סטעווו כטמטי
	Impact	seismic-related ground failure and liquefaction during construction.													HAZARDS AND HAZARD	Potential to disturb ashestos-	containing material	during			

	Record of Implementation		Bureau of Contract Administration Records		Bureau of Contract Administration Records	Bureau of Contract	Administration Records	Bureau of Contract Administration Records	Bureau of Contract Administration Records
	Enforcement Responsibility		Bureau of Contract Administration		Bureau of Contract Administration	Bureau of Contract	Administration	Bureau of Contract Administration	Bureau of Contract Administration
	Implementation Vehicle		Contract Contract		Construction Contract	Construction Contract		Construction Contract	Construction Contract
UCTION PHASE	Implementation Responsibility		Contractor Contractor		Construction Contractor	Construction		Construction Contractor	Construction Contractor
CONSTR	Mitigation Measure	Air Quality Management District's Rule 1403, as well as all other state and federal rules and regulations.	HAZ-2: Prior to demolition of the existing structures, a lead-based paint (LBP) survey shall be conducted at the project site. The survey shall include the sampling of paint in various representative areas. The samples shall consist of paint chips physically removed from the walls and analyzed for lead. If LBP is detected, a licensed LBP abatement contractor shall be retained to remove all LBP and abate the buildings in compliance with all applicable local, state, and federal regulations.	- 	NOI-1: Construction equipment shall be properly maintained and equipped with mufflers.	NOI-2: The pile driver points of impact shall	adverte the second appoint appointed of a second absorptive material or dampeners. As discussed in the <i>Federal Highway Administration Construction Noise Handbook</i> , sound aprons consist of sound absorptive mats hung from construction equipment or on frames attached to equipment.	NOI-3: Construction equipment shall have rubber tires instead of tracks.	NOI-4: Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.
	Impact		Potential to disturb lead-based paint during construction	Noise	Potential to increase noise levels in areas immediately	adjacent to the			
CONSTRUCTION PHASE	ement Record of sibility Implementation	au of Bureau of ract Contract stration Administration Records	au of Bureau of ract Contract stration Administration Records	au of Bureau of ract Contract stration Administration Records	au of Bureau of ract Contract stration Administration Records	au of Bureau of ract Contract stration Administration Records			
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	lementation Enforce Vehicle Respons	lic Outreach Burea Contr Adminis	onstruction Burea Contract Contr Adminis	Distruction Burea Contract Contr Adminis	lic Outreach Burea Contr Adminis	Contract Burea Contract Contr Adminis			
	Implementation Imp Responsibility	Project Manager Pub	Construction Co Contractor	Construction Co Contractor	Project Manager Pub	Construction Co Contractor			
	Mitigation Measure	NOI-5: A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.	NOI-6: The construction manager shall coordinate with the site administrator for Dorsey High School to schedule construction activity such that student exposure to noise is minimized.	NOI-7: Pile driving activity shall be limited to between 9:00 a.m. and 3:00 p.m.	NOI-8: The public shall be notified in advance of the location and dates of construction hours and activities.	NOI-9: As mandated in the Los Angeles Municipal Code Section 41.40, construction activities shall be prohibited between the hours of 9:00 p.m. and 7:00 a.m. when located within 500 feet of occupied sleeping quarters or other land uses sensitive to			
	Impact								