

**DRAFT
ENVIRONMENTAL
IMPACT REPORT**

**TWO BUNCH PALMS
RESORT SPECIFIC
PLAN**

**PREPARED FOR
CITY OF
DESERT HOT SPRINGS**

**PREPARED BY
LSA ASSOCIATES, INC.**

OCTOBER 23, 2006

DRAFT
ENVIRONMENTAL IMPACT REPORT
TWO BUNCH PALMS SPECIFIC PLAN
STATE CLEARINGHOUSE NUMBER 2006051145
in
DESERT HOT SPRINGS
RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

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LSA Project No. JHK530

October 25, 2006

TABLE OF CONTENTS

1.0 INTRODUCTION	1-1
1.1 PROJECT SUMMARY	1-1
1.2 PROJECT LOCATION	1-1
1.3 PROJECT APPROVALS	1-1
1.4 STATUTORY AUTHORITY	1-6
1.5 ORGANIZATION AND CONTENT	1-6
1.6 PUBLIC REVIEW AND COMMENTS	1-7
2.0 PROJECT SUMMARY	2-1
2.1 SUMMARY OF IMPACTS	2-1
2.2 AREAS OF CONTROVERSY	2-1
2.3 ISSUES TO BE RESOLVED	2-1
3.0 PROJECT DESCRIPTION	3-3
3.1 PROJECT LOCATION AND BOUNDARIES	3-1
3.2 PROJECT OBJECTIVES	3-1
3.3 PROJECT HISTORY	3-2
3.4 PROJECT SITE CHARACTERISTICS	3-2
3.4.1 Surrounding Land Uses	3-4
3.4.2 Current City General Plan Land Use and Zoning Designations	3-4
3.4.3 Current City Zoning Designations	3-6
3.5 PROPOSED PROJECT ELEMENTS	3-6
3.5.1 Specific Plan	3-6
3.5.2 Tentative Tract Map	3-7
3.5.3 Residential and Open Space	3-9
3.5.4 Vehicular Circulation	3-9
3.5.5 Pedestrian Access	3-11
3.5.6 Site Grading	3-11
3.5.7 Drainage Improvements	3-11
3.5.8 Architectural Concept	3-12
3.5.9 Project Construction/Phasing	3-12
3.5.10 Homeowners Association (for Both Residents and Visitors Units)	3-12
3.5.11 Utilities	3-13
3.6 OWNERS PARTICIPATION AGREEMENT	3-13
3.8 INTENDED USES OF THIS EIR	3-13
4.0 ENVIRONMENTAL EVALUATION	4-1
4.1 INTRODUCTION	4-1
4.2 AESTHETICS	4-2
4.2.1 Existing Setting	4-2
4.2.2 Thresholds of Significance	4-2
4.2.3 Project Impacts	4-3
4.2.4 Summary of Impacts	4-3
4.2.5 Mitigation Measures	4-4
4.2.6 CEQA Level of Significance after Mitigation	4-5

4.3 AGRICULTURE	4-6
4.3.1 Setting.....	4-6
4.3.2 Thresholds of Significance	4-6
4.3.3 Impacts of the Proposed Project	4-6
4.3.4 Summary of Impacts.....	4-7
4.3.5 Potential Mitigation Measures.....	4-7
4.3.6 Level of Significance after Mitigation.....	4-7
4.4 AIR QUALITY	4-8
4.4.1 Existing Setting	4-8
4.4.2 Thresholds of Significance	4-17
4.4.3 Project Impacts	4-29
4.4.4 Summary of Impacts.....	4-31
4.4.5 Mitigation Measures	4-31
4.4.6 CEQA Level of Significance after Mitigation.....	4-33
4.5 BIOLOGICAL RESOURCES	4-34
4.5.1 Setting.....	4-34
4.5.2 Thresholds of Significance	4-37
4.5.3 Impacts of Proposed Project.....	4-37
4.5.4 Summary of Impacts.....	4-39
4.5.5 Mitigation Measures	4-39
4.5.6 Level of Significance after Mitigation.....	4-40
4.6 CULTURAL RESOURCES	4-42
4.6.1 Setting.....	4-64
4.6.2 Thresholds of Significance	4-65
4.6.3 Impacts of the Proposed Project	4-66
4.6.4 Summary of Impacts.....	4-66
4.6.5 Mitigation Measures	4-66
4.6.6 Level of Significance after Mitigation.....	4-66
4.7 GEOLOGY/SOILS AND MINERALS	4-49
4.7.1 Setting.....	4-49
4.7.2 Thresholds of Significance	4-49
4.7.3 Impacts of Proposed Project	4-50
4.7.4 Summary of Impacts.....	4-53
4.7.5 Mitigation Measures	4-53
4.7.6 CEQA Level of Significance after Mitigation.....	4-53
4.8 HAZARDS AND HAZARDOUS MATERIALS.....	4-54
4.8.1 Setting.....	4-54
4.8.2 Thresholds of Significance	4-54
4.8.3 Impacts of Proposed Projects	4-54
4.8.4 Summary of Impacts.....	4-55
4.8.5 Mitigation Measures	4-55
4.8.6 Level of Significance after Mitigation.....	4-55
4.9 HYDROLOGY AND WATER QUALITY	4-56
4.9.1 Setting.....	4-56
4.9.2 Thresholds of Significance	4-56
4.9.3 Impacts of Proposed Project	4-57
4.9.4 Summary of Impacts.....	4-58

4.9.5 Mitigation Measures	4-59
4.9.6 Levels of Significance after Mitigation	4-60
4.10 LAND USE AND PLANNING	4-61
4.10.1 Setting	4-61
4.10.2 Thresholds of Significance	4-61
4.10.3 Impacts of Proposed Project	4-62
4.10.4 Summary of Impacts	4-63
4.10.5 Mitigation Measures	4-63
4.10.6 CEQA Level of Significance after Mitigation	4-63
4.11 MINERAL RESOURCES	4-64
4.12 NOISE	4-67
4.12.1 Existing Setting	4-67
4.12.2 Thresholds of Significance	4-67
4.12.3 Project Impacts	4-68
4.12.4 Summary of Impacts	4-69
4.12.5 Mitigation Measures	4-69
4.12.6 CEQA Level of Significance after Mitigation	4-70
4.13 POPULATION AND HOUSING	4-71
4.13.1 Existing Setting	4-71
4.13.2 Thresholds of Significance	4-71
4.13.3 Impacts of Proposed Project	4-72
4.13.4 Summary of Impacts	4-72
4.14 PUBLIC SERVICES	4-73
4.14.1 Existing Setting	4-73
4.14.2 Thresholds of Significance	4-74
4.14.3 Project Impacts	4-75
4.14.4 Summary of Impacts	4-76
4.14.5 Mitigation Measures	4-76
4.14.6 CEQA Level of Significance after Mitigation	4-76
4.15 RECREATION	4-77
4.15.1 Existing Setting	4-77
4.15.2 Thresholds of Significance	4-77
4.15.3 Impacts of Proposed Project	4-78
4.15.4 Summary of Impacts	4-78
4.16 TRANSPORTATION AND TRAFFIC	4-79
4.16.1 Existing Setting	4-79
4.16.2 Thresholds of Significance	4-81
4.16.3 Project Impacts	4-82
4.16.4 Summary of Impacts	4-84
4.16.5 Mitigation Measures	4-84
4.16.6 CEQA Level of Significance after Mitigation	4-85
4.17 UTILITIES AND SERVICE SYSTEMS	4-86
4.17.1 Existing Setting	4-86
4.17.2 Thresholds of Significance	4-86
4.17.3 Project Impacts	4-87
4.17.4 Summary of Impacts	4-87
4.17.5 Mitigation Measures	4-87

4.17.6 CEQA Level of Significance after Mitigation.....	4-87
5.0 CUMULATIVE IMPACTS 5-1	
5.1 CUMULATIVE IMPACTS METHODOLOGY	5-1
5.2 CUMULATIVE IMPACT ANALYSIS BY ENVIRONMENTAL PARAMETER	5-2
5.2.1 Aesthetic Resources.....	5-2
5.2.2 Agriculture.....	5-2
5.2.3 Air Quality.....	5-2
5.2.4 Biological Resources.....	5-3
5.2.5 Cultural Resources.....	5-3
5.2.6 Geology and Soils.....	5-3
5.2.7 Hazards and Hazardous Materials	5-4
5.2.8 Hydrology and Water Quality	5-4
5.2.9 Land Use and Planning.....	5-5
5.2.10 Noise.....	5-5
5.2.11 Mineral Resources	5-5
5.2.12 Population and Housing.....	5-5
5.2.13 Public Services	5-6
5.2.14 Recreation.....	5-6
5.2.15 Transportation and Traffic.....	5-6
5.2.16 Utilities and Service Systems	5-7
6.0 ALTERNATIVES TO THE PROPOSED PROJECT 6-1	
7.0 ADDITIONAL TOPICS REQUIRED BY CEQA 7-1	
7.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED.....	7-1
7.1.1 Air Quality.....	7-1
7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WILL BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED.....	7-1
7.3 GROWTH INDUCEMENT.....	7-2
8.0 LIST OF PREPARERS 8-1	
8.1 CITY OF DESERT HOT SPRINGS	8-1
8.2 LSA ASSOCIATES (PREPARATION OF THE EIR)	8-1
9.0 REFERENCES 9-1	

LIST OF APPENDICES

Appendix A:	Notice of Preparation
Appendix B:	Responses to NOP
Appendix C:	Vesting Tentative Maps, Grading Plans, Utility Plans
Appendix D:	Air Quality Report
Appendix E:	Biological Resources Report
Appendix F:	Cultural Resources Reports
Appendix G:	Traffic Study
Appendix H:	Noise Study
Appendix I:	Hydrology Study
Appendix J:	Phase 1 Study
Appendix K:	Geotechnical Report and Fault Hazard Study
Appendix L:	Water Supply Verification and Assessment
Appendix M:	Zoning Overlay Ordinance
Appendix N:	Morongo Scoping Session Letter

LIST OF FIGURES

Figure 1.2-1: Regional Location.....	1-2
Figure 1.2-2: Project Location.....	1-3
Figure 1.2-3: Proposed Site Plan.....	1-4
Figure 1.3-1: Concept Master Plan.....	1-5
Figure 3.4-1: Two Bunch Palms Site Aerial Photograph.....	3-3
Figure 3.4-2: Existing General Plan Land Use Designations.....	3-5
Figure 3.5-1: Tentative Tract Map #34522.....	3-8
Figure 3.5-2: Graphics from TTM.....	3-10
Figure 4.5-1: Mesquite Habitat.....	4-37
Figure 4.7-1: Alquist Priolo.....	4-49
Figure 4.7-2: Two Bunch Palms Fault Zone.....	4-50

LIST OF TABLES

Table 2.1-A: Impact Summary.....	2-2
Table 3.4-A: City of Desert Hot Springs R-VS Zoning Standards.....	3-6
Table 4.4-A: Salton Sea Air Basin Attainment Status.....	4-8
Table 4.4-B: Ambient Air Quality Standards.....	4-9
Table 4.4-C: Health Effects Summary of the Major Criteria Air Pollutants.....	4-11
Table 4.4-D: Ambient Air Quality at the Palm Springs Air-Monitoring Station.....	4-13
Table 4.4-E: Peak Construction Day Emissions (lbs/day).....	4-20
Table 4.4-F: Peak Grading Day—Total Emissions (lbs/day).....	4-25
Table 4.4-G: Project Operational Emissions.....	4-24
Table 4.4-H: Existing CO Concentrations.....	4-27
Table 4.4-I: 2007 CO Concentrations.....	4-31
Table 4.4-J: 2009 CO Concentrations.....	4-29

1.0 INTRODUCTION

1.1 PROJECT SUMMARY

This Environmental Impact Report (EIR) addresses the potential for significant environmental impacts that may result from approving the proposed Two Bunch Palms Specific Plan (SP) project located in the City of Desert Hot Springs. This EIR was prepared according to the requirements of the California Environmental Quality Act (CEQA) of 1970 as amended, the *Guidelines for Implementation of the California Environmental Quality Act* (State CEQA Guidelines), and the CEQA implementation guidelines of the City of Desert Hot Springs. The project is proposed by King Ventures, Inc. The Lead Agency for the preparation of the EIR under CEQA is the **Error! Reference source not found.**

The proposed project involves the development of the approximate 285 gross-acre project site with 1,338 dwelling units, 121,500 square-foot (sf) commercial center, common areas, and interior streets. The project is consistent with the City of Desert Hot Springs General Plan and Zoning Ordinance.

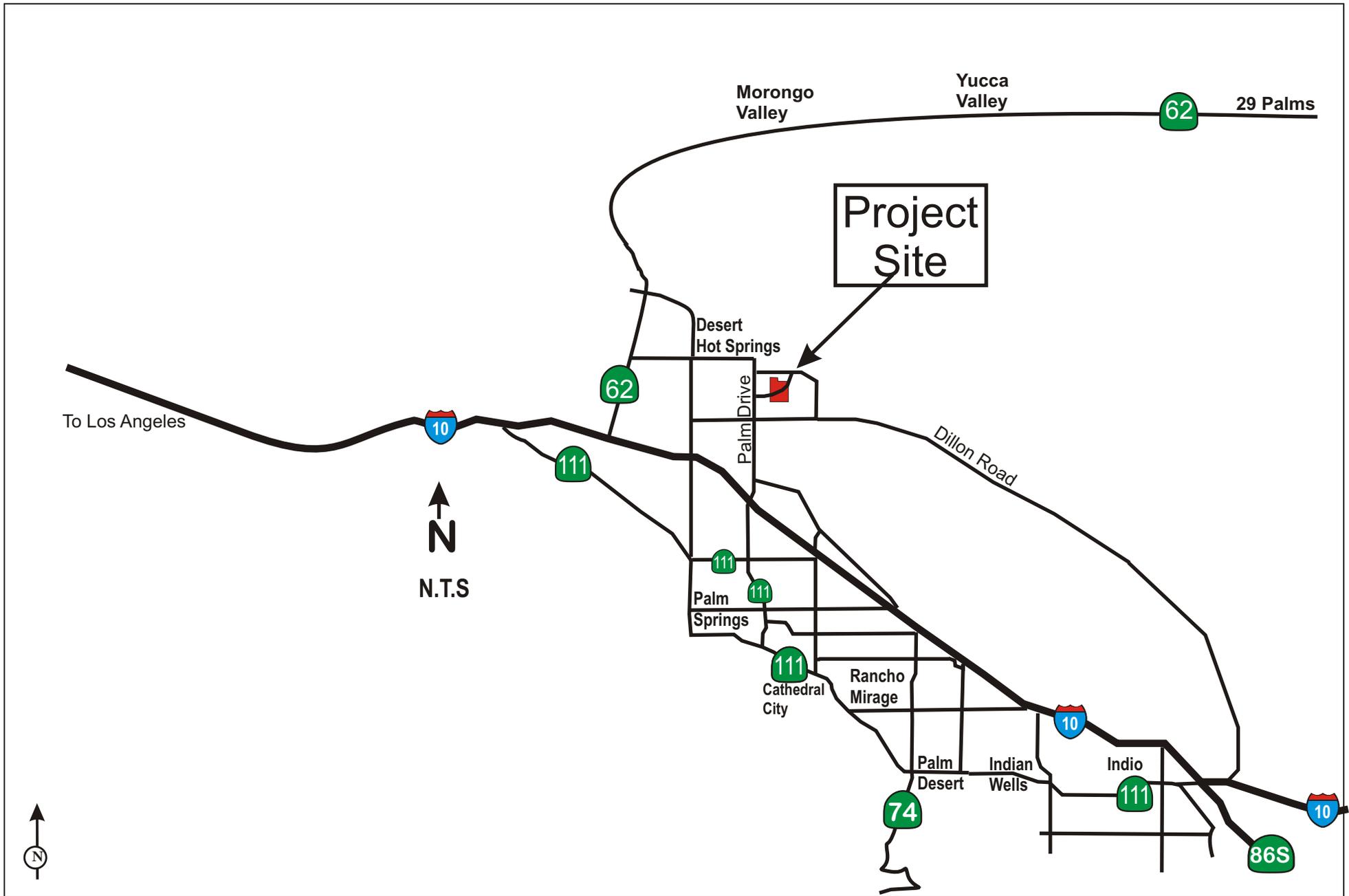
1.2 PROJECT LOCATION

The regional location of the proposed Two Bunch Palms SP project is shown in Figure 1.2-1. The location of the project site is shown in Figure 1.2-2, and the proposed site plan is shown in Figure 1.2-3. The 285-acre Two Bunch Palms project is located in the City of Desert Hot Springs in Riverside County, California. The project site is bounded by Camino Campanero on the south, Verbena Drive on the west, Hacienda Drive on the north, and Miracle Hill Road on the east. The existing Two Bunch Palms Spa is located in the central part of the project area. Low-density residential uses and undeveloped lands surround the site.

1.3 PROJECT APPROVALS

The proposed Two Bunch Palms SP project will require the following approvals that may be based on the information in this EIR:

1. Adoption of the Specific Plans for the proposed Two Bunch Palms SP project
2. Approval of the Vesting Tentative Tract Maps
3. Owners Participation Agreement
4. Design Review Approval
5. Amendment of the General Plan and Zoning Maps to expand the Two Bunch Palms Specific Plan Overlay Zone to incorporate the 10-acre Hacienda Neighborhood and the 2.35-acre expansion of the Miracle Hill Neighborhood.



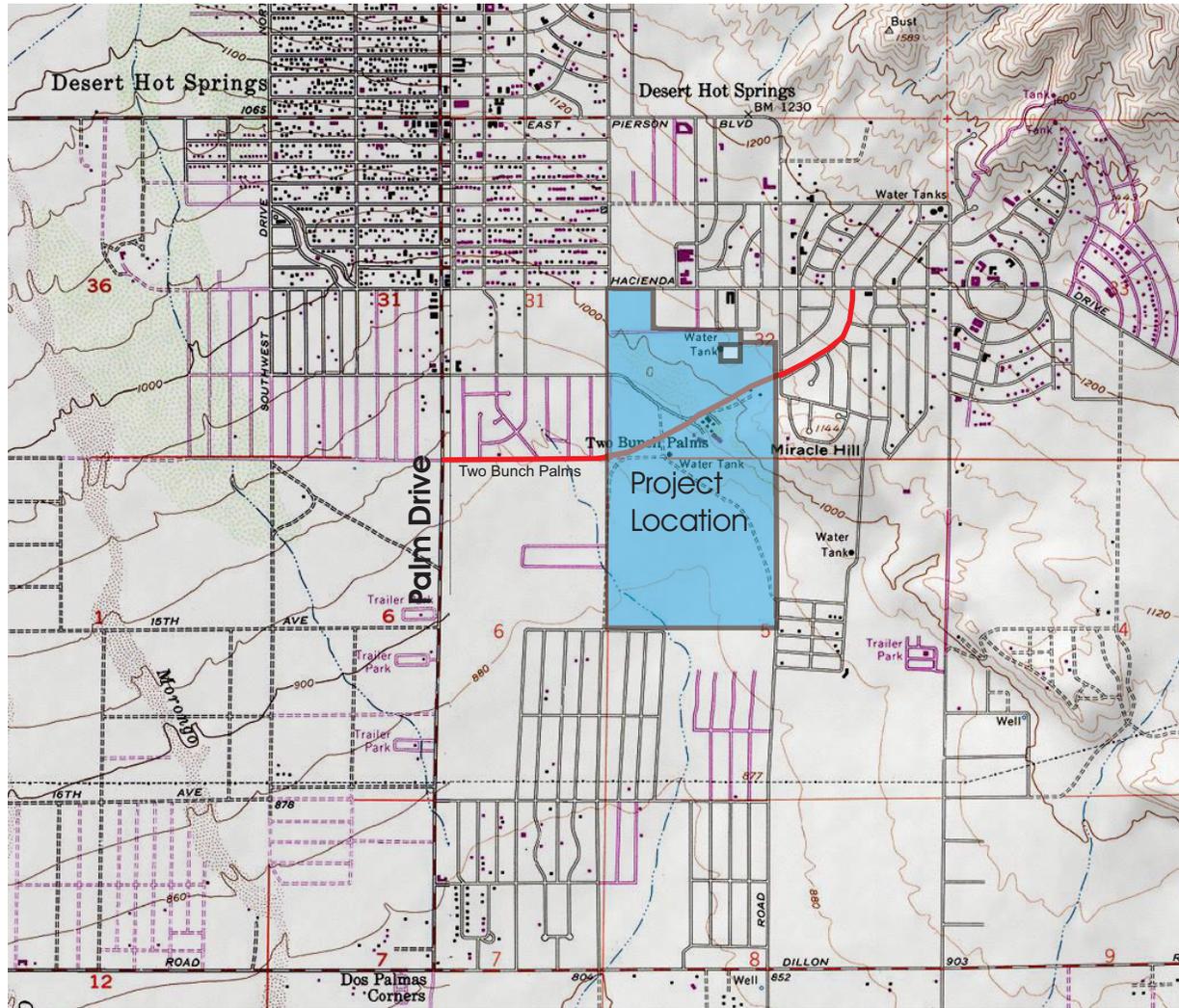
LSA

FIGURE 1.2-1

Two Bunch Palms Specific Plan EIR
Regional Location

SOURCE: LSA

P:\TWO BUNCH PALMS\GRAPHICS\FIGURE 1.2-1 REGIONAL LOCATION.



LSA

FIGURE 1.2-2

Two Bunch Palms Specific Plan EIR
 Project Location

SOURCE: USGS TOPO

P:\TWO BUNCH PALMS\GRAPHICS\FIGURE 1.2-2 PROJECT LOCATION

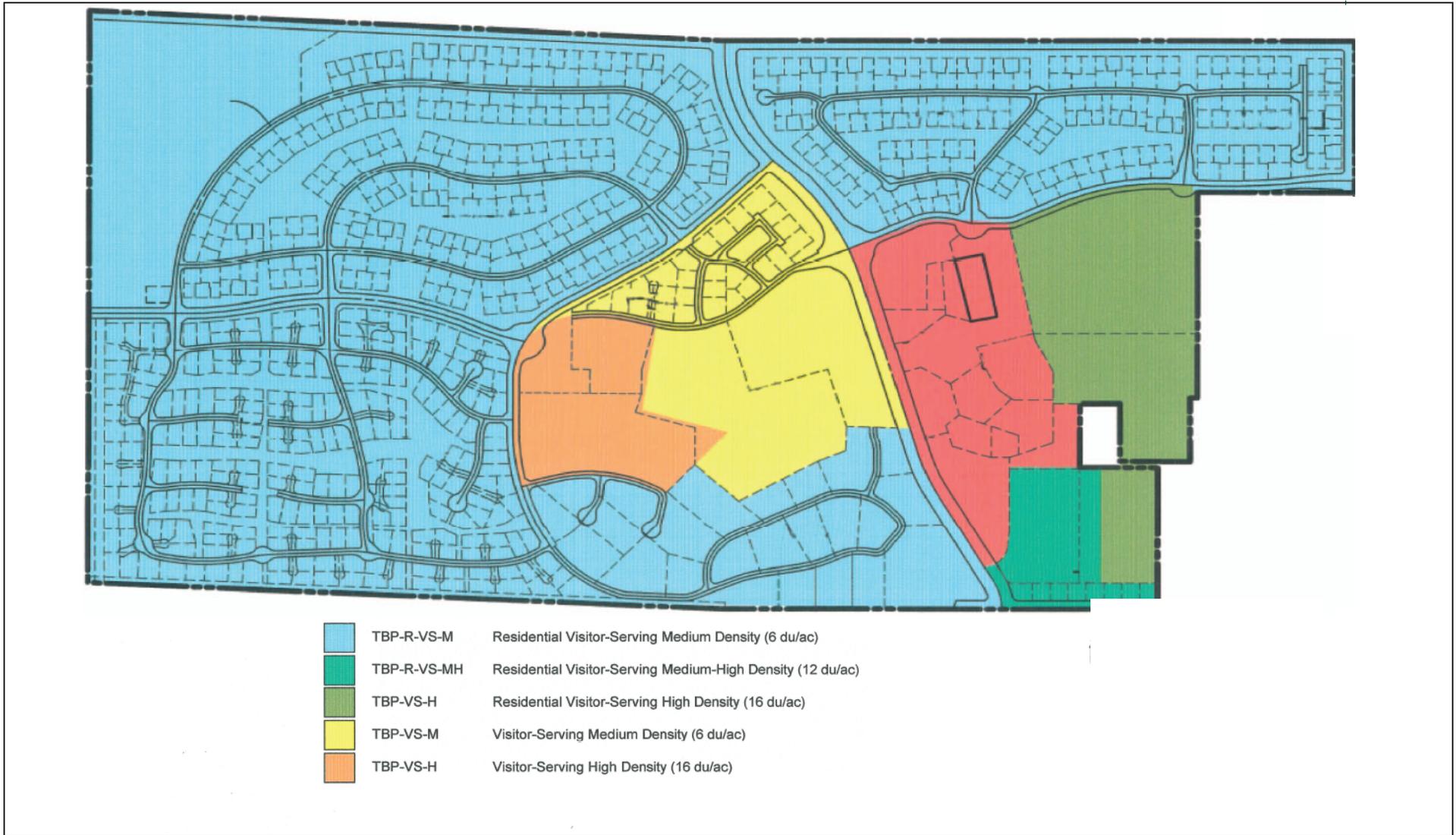


FIGURE 1.2-3

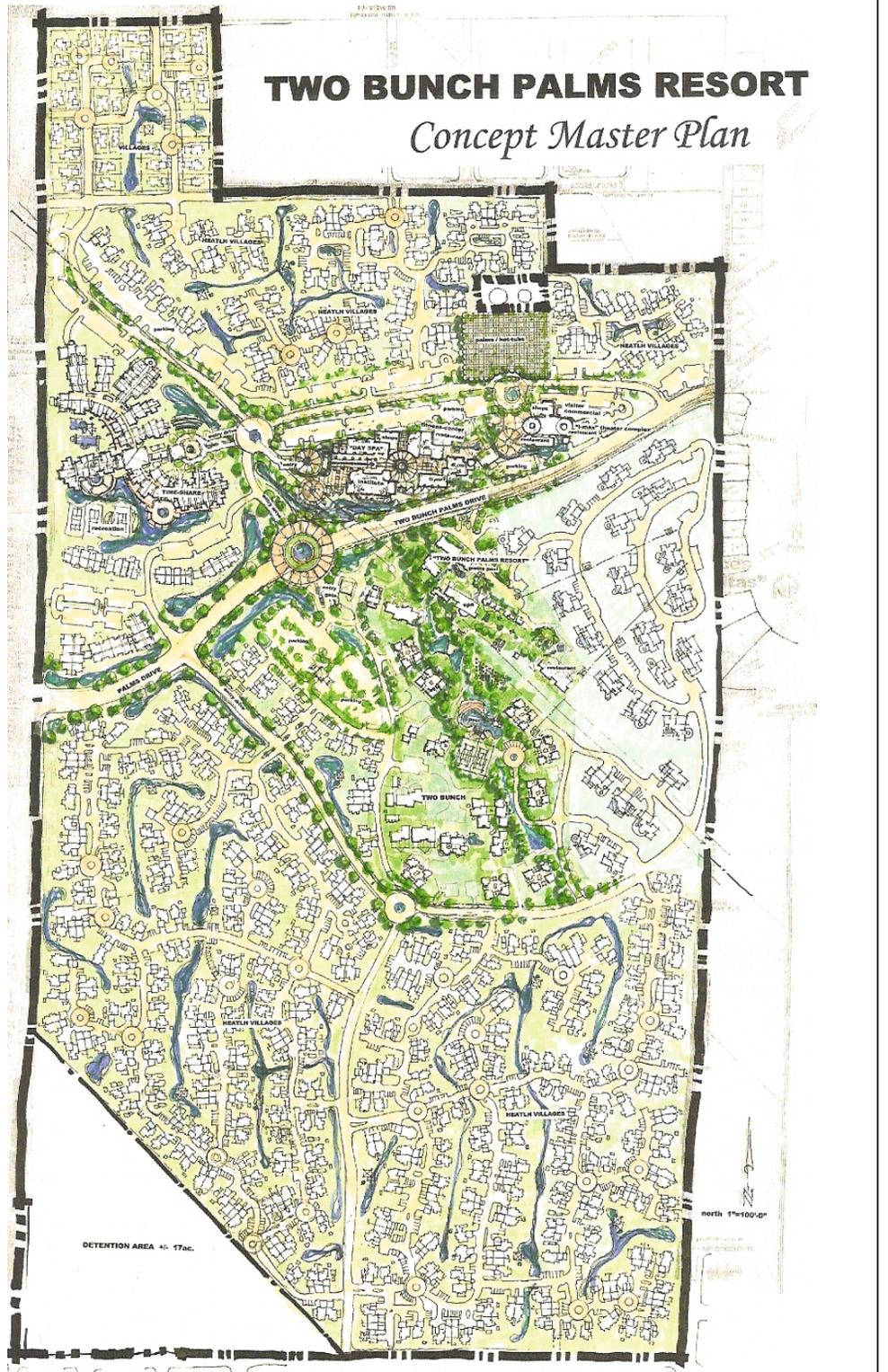


Two Bunch Palms
 Land Use Districts

SOURCE: EDA

TWO BUNCH PALMS RESORT

Concept Master Plan



↑
N
No Scale

LSA

FIGURE 1.3-1

Two Bunch Palms Specific Plan EIR
Conceptual Site Plan

SOURCE: KING VENTURES, DECEMBER 2005

P:\TWO BUNCH PALMS\GRAPHICS\FIGURE 1.3-2 CONCEPTUAL SITE PLAN

1.4 STATUTORY AUTHORITY

In its capacity as the Lead Agency under CEQA for the proposed Two Bunch Palms SP project, the City of Desert Hot Springs has requested the preparation of this EIR in fulfillment of its environmental review obligations pursuant to provisions of the *State CEQA Guidelines*, as amended. This EIR provides the City of Desert Hot Springs decision-makers and other public agencies as well as private groups and individuals with an objective assessment of the extent to which significant environmental impacts may occur if the proposed Two Bunch Palms SP project is implemented.

1.5 ORGANIZATION AND CONTENT

This Two Bunch Palms SP project EIR is organized as follows:

Section 1.0: *Introduction* describes the purpose of, and statutory basis for, this EIR.

Section 2.0: *Summary of Impacts and Mitigation Measures* summarizes the anticipated significant impacts of the proposed Two Bunch Palms SP project and measures that could prevent or substantially reduce adverse project impacts.

Section 3.0: *Project Description* describes the location, boundary, planning background, objectives, and important project characteristics of the proposed Two Bunch Palms SP project.

Section 4.0: *Environmental Evaluation* contains the analyses and other substantial evidence used by the City of Desert Hot Springs, as the CEQA Lead Agency, to review and to make determinations about the proposed Two Bunch Palms SP project.

Section 5.0: *Cumulative Impacts* addresses potential cumulative impacts of the Two Bunch Palms SP project and other development in the area.

Section 6.0: *Alternatives to the Proposed Project* describes alternatives to the proposed Two Bunch Palms SP project as required by CEQA.

Section 7.0: *Additional Topics Required by CEQA* describes “Significant Unavoidable Environmental Effects Should the Proposed Project Be Implemented,” “Significant Irreversible Environmental Changes Should the Proposed Project Be Implemented,” and “Growth Inducing Impacts.”

Section 8.0: *List of Preparers* lists the City of Desert Hot Springs and consultant personnel who have contributed to the preparation of this EIR.

Section 9.0: *References* lists the references used in the preparation of this EIR.

Section 10.0: *Comments* provides a summary of the written comments received in response to the Notice of Preparation (NOP) for this EIR.

Appendices

Appendix A:	Notice of Preparation
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Appendix E:	Biological Resources Report
Appendix F:	Cultural Resources Report
Appendix G:	Traffic Study
Appendix H:	Noise Study
Appendix I:	Hydrology Memoranda
Appendix J:	Phase 1 Study
Appendix K:	Geotechnical Report and Fault Hazard Study
Appendix L:	Water Supply Verification and Assessment
Appendix M:	Zoning Overlay Ordinance
Appendix N:	Morongo Scoping Session letter

1.6 PUBLIC REVIEW AND COMMENTS

This document will be released for public review and comment between October 26 and December 11, 2006. Written comments should be directed to:

Mr. Steven Mendoza
Assistant City Manager
City of Desert Hot Springs
65950 Pierson Boulevard
Desert Hot Springs, California 92240

2.0 PROJECT SUMMARY

2.1 SUMMARY OF IMPACTS

Table 2.1-A summarizes the potential adverse impacts of the proposed Two Bunch Palms Specific Plan (SP) project, identifies mitigation measures included in the project to avoid or substantially reduce significant adverse project impacts, and assesses project impacts according to their levels of significance after mitigation.

As shown in Table 2.1-A and described in detail in Section 4.0, Environmental Evaluation, the proposed Two Bunch Palms SP project will result in significant unavoidable adverse impacts that cannot be mitigated below a level of significance related to the following:

- **Air quality impacts resulting from cumulative effects**

2.2 AREAS OF CONTROVERSY

Cultural Resources

The City of Desert Hot Springs and the Agua Caliente Band of Indians has not come an agreement on the standards regarding cultural resources.

2.3 ISSUES TO BE RESOLVED

Cultural Resources

The City Planning Commission and the City Council must resolve the following issues:

1. Shall the tentative maps, specific plan, annexation, and other associated project actions be approved?
2. Are the recommended mitigation measures adequate?
3. Even after mitigation, the project is anticipated to have adverse impacts to air quality. To approve the project, the City Council will need to adopt a Statement of Overriding Considerations, stating why the City believes that the project should be approved despite the environmental impacts.

Potential project benefits the Council may consider include the following:

1. Increase in the City's new housing stock, including a range of housing types and price levels.
2. New public improvements, commercial development, cultural facilities, and recreational opportunities, including trails and access to off-site trails.
3. Increased revenue to the City in the form of development-related fees for infrastructure and public facilities.

4. Increased customer base for area businesses.
5. Economic development to stabilize the City.
6. Increased sales tax and transient occupancy tax revenues to the City.
7. Residential uses incorporated into the commercial center to reduce transportation demand via mixed-use concepts.
8. Increased customer base for existing and planned commercial uses, thereby increasing sales tax revenues to the City.
9. A significant dedication of permanent open space.

Table 2.1-A: Impact Summary

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
Aesthetics		
IMPACT AES-1 Water wells and reservoirs may potentially adversely impact scenic viewsheds.	MM AES-1 Prior to design review approval, the project applicant will prepare, and the City will review and approve, a screening design for water wells and storage reservoirs.	Impact is mitigated below a level of significance.
IMPACT AES-2 The land uses on the project site may result in potential adverse impacts relating to light impacts on night skies and potential adverse impacts of nighttime illumination in residential areas.	MM AES-2 The Director of Planning shall review and ensure that the lighting plan, to be included in the SP, meets the requirements of the City’s Lighting Standards that includes as a minimum the following requirements: <ul style="list-style-type: none"> • All public walkways will be illuminated with light standards appropriately spaced and no more than four feet high. • Waterway and park areas will be illuminated with appropriately spaced light standards no more than 18 feet high and equipped with glare shields to aim all light at the ground. • Private streets will not have street lighting. • Commercial lighting will be turned off after 10:00 pm except for security lighting, all light standards will be equipped with glare shields to aim all light at the ground. 	Impacts are mitigated below a level of significance.
IMPACT AES-3 The land uses on the project site under the proposed Two Bunch Palms SP project may include signage that adversely impacts scenic viewsheds.	MM AES-3 Prior to the issuance of any building permit, a sign program addressing both the residential and commercial components of the project shall be approved by the Planning Commission.	Impact is mitigated below a level of significance.
IMPACT AES-4 The reduced building setbacks as set forth in the SP related to the	MM AES-4 A private landscape buffer will be incorporated where the project abuts public streets.	Impact is mitigated below a level of

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
proximity of buildings to the street will have an aesthetic impact.		significance.
IMPACT AES-5 Grading activities associated with project construction will impact aesthetics.	MM AES-5 Grading, including retaining walls and areas of cut and fill, shall be reviewed prior to tentative tract map approval.	Impact is mitigated below a level of significance.
IMPACT AES-6 Some buildings proposed within the SP area will be significantly taller than existing buildings in the area and thus would have a considerable visual impact.	MM AES-6 Any two-story development within the SP area shall undergo design review of floor plans, site plan, and elevations by the Planning Commission.	Impact is mitigated below a level of significance.
Air Quality		
IMPACT AQ-1 Short term adverse PM ₁₀ and NO _x emissions during construction.	MM AQ-1 Prior to the approval of a grading plan for the project, the City of Desert Hot Springs City Engineer will condition the grading plan to require the contractor to do the following: <ul style="list-style-type: none"> • Perform regularly scheduled equipment maintenance to minimize equipment emissions. • Use cooled exhaust gas recirculation (EGR) on both on- and off-road vehicles and equipment. • Use alternative fuels such as ultra-low sulfur diesel fuels for off-road construction vehicles and equipment where possible. • Revegetate disturbed areas as quickly as possible. • Suspend all excavating and grading operations when wind speeds exceed 25 mph. • Sweep all streets once per day if visible soil materials are carried to adjacent streets. • Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the 	Impact is mitigated below a level of significance.

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>site each trip.</p> <ul style="list-style-type: none"> • Pave all on-site roads as soon as feasible, water periodically, or chemically stabilize, as appropriate. • Minimize the area disturbed by clearing, grading, earthmoving, or excavation operations at all times. • Follow a phased approach to the application of architectural coatings to limit the amount of architectural coating off-gas by limiting application of architectural coatings to 225 gallons per week or less and the use of an asphalt sealer to reduce off-gassing and odors associated with new asphalt. • Adhere to SCAQMD Rule 403 and 402 measures. • Select the construction equipment used on site based on low-emission factors and high energy efficiency • Time the construction activities so as to not interfere with peak-hour traffic and to minimize obstruction of through-traffic lanes adjacent to the site. • Ensure that construction grading plans include a statement that work crews will shut off equipment when not in use. • Implement a ride-sharing plan for the construction crew. • No more than 100 acres shall be graded at any given time. 	
<p>IMPACT AQ-2 Long term adverse impacts related to ROC, NO_x and CO emissions during operations as a result of cumulative effects.</p>	<p>MM AQ-2 Prior to the approval of any building permit for any part of the project, the City Building Official and Planning Director will condition the building permit to require the contractor to do the following:</p> <ul style="list-style-type: none"> • Provide electrical outlets in the fronts and backs of the residential units to facilitate the use of electric landscape equipment. 	<p>Long-term air quality impacts remain significant after mitigation due to cumulative effects.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Use solar or low-emission water heaters or combined space/water heaters. • Use central water heating systems. • Strictly limit any interior or exterior fireplaces or fire pits to natural gas; wood-burning fireplaces will be prohibited. • Plant trees to provide shade and shadow to buildings. • Use energy-efficient low-pressure sodium parking lot lights if required by the City Engineer and Planning Director. • Use double-paned glass or window treatments for energy conservation in all exterior windows. 	
Biological		
<p>IMPACT BIO-1 The proposed Two Bunch Palms SP project may result in adverse effects on the native plant and animal communities in the open areas to the south of the project site due to invasion of exotic species, human intrusion, domestic pets, and lighting.</p>	<p>MM BIO-1 Prior to approval of Building Final, the project applicant will prepare, and the City Director of Planning will review and approve, an educational brochure that describes the sensitive nature of indigenous plants, animals and ecosystems on and adjacent to the Two Bunch Palms SP project site. This brochure will be provided to all employees, residents, and visitors on the Two Bunch Palms SP project site. Prior to the approval of a Master Landscape Plan, the City Director of Planning will review the Plan to ensure that landscaped community and common areas incorporate native plant species. Prior to the submittal of any landscape plan, the project biologist will review and approve the plan.</p>	<p>Impact is mitigated below a level of significance.</p>
<p>IMPACT BIO-2 The proposed Two Bunch Palms SP project will eliminate approximately 14 acres of mesquite hummock habitat.</p>	<p>MM BIO-2 Provide funds to a city-designated conservancy agency at a ratio of 1:1 or acquire habitat for same for the 14 acres of mesquite hummock lost.</p>	<p>Impact is mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>IMPACT BIO 5-3 Although no lizards were encountered on the site, there is potential fringe-toed habitat at the southernmost portion of the site.</p>	<p>MM BIO-3 The project proponent will pay a sum of \$171,000 to the City of Desert Hot Springs as a mitigation fee for impacts to the habitat of the fringe-toed lizard. This fee was calculated by multiplying the standard mitigation fee of \$600 per acre by the total project acreage of 285.</p>	<p>Impact is mitigated below a level of significance.</p>
<p>IMPACT BIO-4 The Palm Springs ground squirrel, a species of special concern, was encountered on the project site.</p>	<p>MM BIO-4 The project proponent will pay a sum of \$2,500 to a Center for Natural Lands Management as a mitigation fee for impacts to the habitat of the Palm Springs ground squirrel.</p>	<p>Impact is mitigated below a level of significance.</p>
<p>IMPACT BIO-5 The proposed Two Bunch Palms SP project will increase the amount of ambient light in the project area.</p>	<p>MM BIO-5 Prior to the approval of any building permits, the Director of Planning of the City of Desert Hot Springs will review building plans and a photometric study, submitted by project applicant, to ensure that outdoor project lighting is minimized consistent with public safety needs and directed at the ground and away from adjacent native, undeveloped areas. By directing lighting toward the ground and away from native areas, night time glare and light sources and potential adverse impacts to nocturnal species will be minimized</p>	<p>Impact is mitigated below a level of significance.</p>
Cultural		
<p>IMPACT CULT-1 Phase 1 study suggested the potential presence of archaeological artifacts on the project site.</p>	<p>MM CULT-1 A data recovery program will include the following procedures:</p> <p>Preparation of a research design, including plans for site monitoring and detailing procedures to be followed in the event of unanticipated discovery of archaeological or paleontological artifacts.</p> <ul style="list-style-type: none"> • Systematic collection of surface artifacts • Excavation of archaeological recovery units to exhaust the data potential of the site. 	<p>Impact is mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> • Laboratory analysis of collected artifacts • Cataloging and preparation of all artifacts for permanent curation at an appropriate facility • Preparation of a final report to summarize the findings of the procedures listed above, and to interpret such findings within the context of a regional research design • Upon Completion and acceptance of the final Report the material shall be curated at a permanent repository so that the collection is available to Tribal members and professional archaeologists. • If any additional possible human remains are encountered, all work in that area will be halted while the Riverside County Coroner's Office is contacted and appropriate measures taken. <p>In the event of the discovery or recognition of any human remains in any location on the project site, the following steps will be taken:</p> <ol style="list-style-type: none"> 1. All excavation and disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains will be suspended until: <ol style="list-style-type: none"> (a) The Riverside County Coroner is contacted to determine whether investigation of the cause of death is required. (b) If the Coroner determines that no investigation is required, and that the remains are Native American: The Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will identify the person or persons it believes to be the most likely descended from the deceased Native American. The most likely descendent (MLD) may make recommendations to the landowner or the person responsible 	

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.</p> <p>Additionally, an approved Tribal Cultural Resource Monitor(s) shall be present during any survey and/or any ground disturbing activities. Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente THPO.</p> <p>If human remains are encountered during project construction, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.36.</p> <p>The following actions must be taken immediately upon the discovery of human remains: a. Stop immediately and contact the County Coroner; b. The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission; c. The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American; d. The most likely descendent has 24 hours to make recommendation to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods; e. If the descendant does not make recommendations within 24 hours the owner shall re-inter the remains in an area of the property secure from further disturbance, or if the owner does not accept the descendant's recommendation, the owner of the</p>	

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	descendant may request mediation by the Native American Heritage Commission.	
<p>IMPACT CULT-2 Project grading may result in the discovery of previously unknown paleontological resources. Monitoring of site during grading is recommended.</p>	<p>MM CULT-2 Prior to issuance of grading permits, the applicant shall submit the signed paleontological monitoring contract to the City. Paleontological monitoring will be performed on older, undisturbed alluvium deposits, especially the northeastern portion of the site, where vulnerable paleontological resources are most likely to be. The monitor will salvage fossils quickly and will remove sediments likely to contain remains of small fossil vertebrates and invertebrates. The monitor will have the authority temporarily to halt or to divert grading equipment in order to allow for removal of large or abundant specimens. Full-time paleontological monitoring shall be performed on the northeastern portion of the project site, and periodic monitoring is recommended in the northwestern and southern portions if excavations exceed the depth of ten feet.</p>	<p>Impact is mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>IMPACT CULT-3 Phase 1 study suggested the potential presence of archaeological artifacts on the project site.</p>	<p>MM CULT-3 Collected samples will be washed to recover small invertebrate and vertebrate specimens. Recovered specimens will be prepared for permanent preservation.</p> <p>MM CULT-4 Specimens will be identified and curated and placed in a repository with permanent retrievable storage.</p> <p>MM CULT-5 A report of findings, including an itemized inventory of recovered specimens, will be prepared upon completion of the other related steps noted. The report will include a discussion of the significance of all recovered specimens. The report and inventory, when provided to the appropriate Lead Agency, will signify completion of the program to mitigate impacts to paleontological resources.</p> <p>MM CULT-6 During any earth-moving activities, the developer(s) will take mitigation measures geared to the areas of the site where the majority of significant historical and cultural materials were found. These measures will include but are not limited to the following:</p> <ul style="list-style-type: none"> • Complete Phase 2 reports more precisely delineating the site boundary and documenting the history and prehistory of the Two Bunch Palms site • Conduct fulltime, on-site archaeological monitoring program during all grading into native soils • Establish sidewalks and walking trails with signage highlighting the history of the site and its role in Native American history of the region • Along the trails, include photos and (with tribal consent) displays of the archaeological materials discovered during Phase 2 studies • Produce a program for use of the amphitheater and/or theaters for regular events and gatherings that are open to the public for the Native American community 	<p>Impact is mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
Geology and Soils		
<p>IMPACT GEO-1 The proximity of fault traces within the Alquist-Priolo Earthquake Study Zone and soil condition indicate the potential for strong ground motion on the project site.</p> <p>IMPACT GEO-2 Strong ground shaking can lead to liquefaction, which in turn can lead</p>	<p>MM GEO-1 Design shall comply with the latest edition of the California Building Code for Seismic Zone 4 using the seismic coefficient provided in the Geotechnical Report by LandMark Consultants.</p> <p>MM GEO-2 Liquefaction impacts shall be mitigated by vibro-compaction, vibro-replacement, geopiers, stone columns, compaction</p>	<p>Impacts will be mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>to excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations.</p> <p>IMPACT GEO-3 Surface fault rupture is possible because a splay of the Mission Creek Fault is inferred across the central portion of the project site in a northwest to southeast direction.</p> <p>IMPACT GEO-4 Rupture of water tanks could result in flooding.</p>	<p>grouting, or deep dynamic compaction. Other means include a deep foundation system, rigid mat foundations, and grade-beam reinforced foundations that can withstand some differential movement or tilting.</p> <p>MM GEO-3 Proposed Residential Resort Lots identified in the VTTM will be modified so that lots and appropriate building sites are located outside the fault and setback zones shown in Exhibit 4.7-2.</p> <p>MM GEO-4 All water tanks shall be designed to MSWD standards.</p>	
Hazards and Hazardous Materials		
<p>IMPACT HAZ-1 During renovations, additional asbestos may be found.</p>	<p>MM HAZ-1 Prior to the approval of a grading plan, the project proponent will provide evidence to the building official that any asbestos hazard has been removed and disposed of at a permitted landfill following appropriate protocols. Subsequently, if additional asbestos is found during renovations, renovations will stop, and the asbestos will be removed and disposed of at a permitted landfill by a licensed asbestos contractor following appropriate protocols.</p>	<p>Impact is mitigated below a level of significance.</p>
<p>IMPACT HAZ-2 During grading, there remains a remote chance on encountering a buried underground storage tank.</p>	<p>MM HAZ-2 Prior to the approval of a grading permit, the City Engineer / Building Official will ensure that the following condition has been applied to the grading plans: If an underground storage tank is discovered during construction, work in the area will halt until an evaluation of a potential release has been completed. If a release has occurred, proper notifications will be made to local and State officials, and appropriate protocols will be followed to determine cleanup requirements.</p>	<p>Impact is mitigated below a level of significance.</p>
Hydrology and Water		
<p>IMPACT HYD-1 Development of this project will result in increases of impermeable surface</p>	<p>MM HYD-1 Prior to the approval of the final map, the project proponent will submit, and the City Engineer will approve, a Final</p>	<p>Impact is mitigated below a level of</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
<p>and landscape areas, which could produce additional runoff. The preliminary grading and drainage plan indicates that the increased runoff will be addressed through the construction of retention basins, which will reduce flows to pre-existing levels. Given the critical nature of these facilities, their planning and design must be rechecked once final plans are ready for approval.</p>	<p>Drainage Plan that includes the following measures to address storm flow and water quality issues.</p> <ul style="list-style-type: none"> • The plan will be based upon a hydrology study and mitigation plan that implements local and regional requirements, policies and programs. • The plan will demonstrate that off-site storm flows will not be increased, and that all structures in the project are protected from 100-year storm flows. • The plan will identify all affected City rights-of-way, easements, and facilities of the Riverside County Flood Control and Water Conservation District, and the plan will require the developer to secure any requisite encroachment permits from the City or the District. • The plan will include specific pollution control measures and/or designs that meet the requirements of the National Pollution Discharge Elimination System and keep pollutants, including sediment, herbicides, pesticides and oils, out of surface and ground waters. • The plan will describe how on-site storm water retention basins will be used, to the greatest extent practical, to enhance opportunities for groundwater recharge (including hot water recharge), provide additional open space and wildlife habitat, and reduce the necessity for and costs associated with off-site storm water conveyance facilities. • For each drainage improvement required by the project, the plan will identify the agency responsible for long-term maintenance of the facility, and the project developer will obtain an authorization letter from the agency that will assume responsibility for maintenance of improvements. Said letter will clearly identify the sources funding for long-term maintenance of these facilities. • The plan will include measures to ensure that roadway intersections are engineered so that potential ponding at 	<p>significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	such intersections maximizes drainage capacity of the streets and eliminates associated driving hazards.	
<p>IMPACT HYD-2 Construction of the project will increase overall water consumption.</p>	<p>MM HYD-2 Prior to the approval of any building permit, the City Director of Planning and MSWD will review plans to ensure that:</p> <ul style="list-style-type: none"> • Drought-tolerant landscaping and water- efficient irrigation systems are used in all yard areas as a means of reducing water consumption. • The project developer will install low-flush toilets, low-flow showerheads and faucets in all new construction, in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Administrative Code Section 1601(b), and applicable sections of Title 24 of the State Code. • The project will connect to the MSWD sewer system. Use of septic tanks will not be permitted. 	<p>Impact is mitigated below a level of significance.</p>
Land Use/Relevant Planning		
<p>Impacts will be less than significant.</p>	<p>None required.</p>	<p>The project will not have a significant adverse effect on land use.</p>
Mineral Resources		
<p>IMPACT MIN-1 Increased mineral water extractions could lead to a depletion of the mineral ground water basin aquifer.</p>	<p>MM MIN-1 Geothermal mineral waters used at the project shall be collected and concentrated for groundwater recharge purposes in areas suitable for replenishment of the underground geothermal aquifer. This may include reuse for applied irrigation purposes as long as the use of the reclaimed mineral waters for irrigation are applied to areas overlaying the geothermal groundwater basin.</p> <p>MM MIN-2 Implement an annual well monitoring program to document geothermal mineral water use at the project,</p>	<p>Impact is mitigated below a level of significance.</p>

Summary of Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>and to maintain historical records concerning overall hot water basin use and replenishment levels. This information shall be provided to the City, MSWD, and the Regional Water Quality Control Board with the contract to provide such services paid by the HOAs in the project area and administered through by City. In the event that hot water levels drop, the applicant shall identify options to reduce withdrawals and develop a water basin maintenance plan to be approved by the City.</p>	
Noise		
<p>IMPACT NOI-1 Temporary, short-term noise increases will occur during construction. Additionally, construction in the project area may generate limited, short-term, ground-borne vibration or ground-borne noise impacts on surrounding properties.</p>	<p>MM NOI-1 To minimize short-term construction-related noise, the City will incorporate the following items into the grading permit for the Two Bunch Palms SP project:</p> <ul style="list-style-type: none"> • All construction vehicles or equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers. • All stockpiling and/or vehicle staging areas will be located as far from existing residential uses as possible. • Construction hours of operation are as follows: whenever a construction site is within one-quarter (1/4) of a mile of an occupied residence or residences, no construction activities shall be undertaken between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September, and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the City Engineer. 	<p>Impact is mitigated below a level of significance.</p>

<p>IMPACT NOI-2 Exterior noise levels for the planned residential uses on the Two Bunch Palms SP project site may reach exterior and/or interior noise levels that exceed City standards.</p>	<p>MM NOI-2 Prior to the issuance of a grading permit for the proposed Two Bunch Palms SP project, the City will review and approve a final noise study for the project that will determine the requirements for noise attenuation. The final noise study will incorporate the final grading plans and building setback distances and evaluate both project buildout and General Plan buildout traffic volumes.</p> <p>MM NOI-3 To minimize exterior noise impacts, the project applicant shall incorporate the following mitigation measures into their project:</p> <ul style="list-style-type: none"> • A sound barrier with a minimum of six feet shall be required to protect outdoor active use areas such as back yards, patios, and balconies associated with off-site residential land uses within 70 feet of the Two Bunch Palms Trail centerline west of Verbena Drive • A sound barrier with a minimum height of six feet shall be required to protect outdoor active use area such as backyard, patios, and balconies associated with the proposed project for the following areas: <ul style="list-style-type: none"> ○ Within 53 feet of Hacienda Drive centerline east of Verbena Drive ○ Within 76 feet of the Two Bunch Palms Trail centerline east of Verbena Drive 	<p>Impact is mitigated below a level of significance.</p>
	<p>MM NOI- 4 To meet the City’s 45 dBA CNEL interior noise standard, the following mitigation measures will be required:</p> <ul style="list-style-type: none"> • Air-conditioning systems for off-site noise-sensitive structures shall be required for the following areas: <ul style="list-style-type: none"> ○ Within 66 feet of the Verbena Drive centerline south of Two Bunch Palms Trail ○ Within 146 feet of the Camino Campanero centerline east and west of Verbena Drive ○ Within 238 feet of the Two Bunch Palms Trail centerline 	<p>Impact is mitigated below a level of significance.</p>

	<p>west of Verbena Drive</p> <ul style="list-style-type: none"> • Building façade upgrades such as double-paned windows with a minimum rating of STC-30 for the proposed residential structures shall be required within 41 feet of the Two Bunch Palms Trail Centerline east of Verbena Drive • Air-conditioning systems for the proposed residential structures shall be required for the following areas: <ul style="list-style-type: none"> ○ Within 179 feet of the Hacienda Drive centerline east of Verbena Drive ○ Within 258 feet of the Two Bunch Palms Trail centerline east of Verbena Drive 	
Population and Housing		
Impacts will be less than significant	No mitigation measures are required.	The project will not have a significant adverse effect on population and housing.
Public Services		
<p>IMPACT PS-1 The proposed Two Bunch Palms SP project will increase the demand for police, fire, public school, and library services in the project area incrementally.</p>	<p>MM PS-1 Prior to the issuance of any building permit, the project applicant will pay a fee to be agreed upon by the City and the Riverside County Fire Department for the construction of fire stations or other appropriate Fire Department improvements.</p> <p>MM PS-2 Prior to the issuance of any building permit, the City Engineer and Fire Marshall of the City of Desert Hot Springs will ensure that the following components are incorporated into project plans:</p> <ul style="list-style-type: none"> • All water mains and fire hydrants providing fire flows for the project site will be constructed in accordance with the appropriate sections of the California Fire Code 2001 edition, the 	Impacts are mitigated below a level of significance.

	<p>City ordinances/policies and the requirements of the Mission Springs Water District.</p> <ul style="list-style-type: none"> All buildings on the project site will be constructed with tile Roofing material or as otherwise outlined in the City Code. <p>MM PS-3 Prior to the issuance of any building permit, the project applicant will demonstrate to the City of Desert Hot Springs that all applicable school impact fees have been paid to the PSUSD.</p> <p>MM PS-4 Prior to the issuance of any building permit, the project applicant will demonstrate to the City of Desert Hot Springs that all applicable library impact fees have been paid.</p>	
Recreation		
<p>IMPACT REC-1 The project will increase the need for recreational facilities within the City.</p>	<p>MM REC-1 Prior to issuance of building permits, the applicant shall show proof of Quimby Act Fees payment.</p>	<p>Impacts are mitigated below a level of significance.</p>
Transportation and Traffic		
<p>IMPACT TR-1 The project will generate additional vehicular trips. Without roadway improvements, the local roadway system will be overburdened.</p>	<p>MM TR- Prior to the issuance of building permits for the first phase of the development, the Project Proponent shall provide fair-share funding to the City of Desert Hot Springs for the following improvements, based upon the proportion of 2009 project-related traffic using the improvement. Specific improvements include:</p> <ul style="list-style-type: none"> Palm Drive/Camino Campanero – installation of a traffic signal Palm Drive/Varner Road – installation of a traffic signal Palm Drive/I-10 Westbound Ramps – construction the Caltrans-programmed improvements for the I-10/Palm Drive interchange Verbena Drive/Two Bunch Palms Trail – installation of a traffic signal 	<p>These mitigation measures will ensure that traffic operations are maintained at Level of Service “D” or better, consistent with the requirements of the City of Desert Hot Springs General Plan.</p>

<p>IMPACT TR-2 The project will generate additional bicycle and pedestrian usage. Facilities need to be designed to meet applicable standards.</p>	<p>MM TR-2 Prior to the approval of any building permit, the Project Proponent shall pay any required City Transportation fees and TUMF fees.</p>	<p>These mitigation measures will ensure that traffic operations are maintained at Level of Service “D” or better, consistent with the requirements of the City of Desert Hot Springs General Plan.</p>
<p>Utilities and Service Systems</p>		
<p>Project will result in less than significant impacts.</p>	<p>No mitigation measures are necessary.</p>	<p>The project will not have a significant adverse effect on utilities and service systems.</p>

3.0 PROJECT DESCRIPTION

Section 15124 of the *CEQA Guidelines* requires that an EIR include a Project Description containing the following:

- The project location and boundaries
- A statement of the objective sought by the applicant
- A general description of the project's characteristics
- A statement describing the intended uses of the EIR

The *CEQA Guidelines* state that the Project Description need not be exhaustive but should provide the level of detail needed for the evaluation and review of potential environmental impacts. The following sections provide the CEQA-required information for the Two Bunch Palms Project.

3.1 PROJECT LOCATION AND BOUNDARIES

The Two Bunch Palms project is located in the City of Desert Hot Springs in Riverside County, California. The project site is bounded by Camino Campanero on the south, Verbena Drive on the west, Hacienda Drive on the north, and Miracle Hill Road on the west as shown in Figure 1.2-2. The existing Two Bunch Palms Resort and Spa is located in the central part, to the south of Two Bunch Palms Trail, of the project area. Two Bunch Palms Trail bisects the project site. Low-density residential uses and undeveloped lands surround the site.

3.2 PROJECT OBJECTIVES

Objectives of the SP include:

- Integrate the naturally-occurring hot springs into the perimeter residential developments as assets to a healthy-living choice; the medicinal properties of the hot springs become available to residents as well as guests of the resort;
- Clarify boundaries of residential and visitor-serving development envelopes consistent with the City's recently enacted (2004) Hot Water Zone Overlay District;
- Align property lines to match the land use and development envelopes established in the Specific Plan by lot line adjustments;
- Distinguish between public and private infrastructure and capital improvements needed to support the Phasing Plan;
- Establish design guidelines that create coherent master plan uses without unnecessarily limiting individual creativity in architectural design;

- Provide for expanding visitor-serving use of the outlying residential land as a part of the Two Bunch Palms Resort and Spa operation;
- Execute an Owners Participation Agreement between the City and the property owners to confirm the respective parties' responsibilities in the improvement of the Specific Plan site.

The development of the Two Bunch Palms property, as outlined in the Specific Plan (SP), will coordinate improvement of the various land uses and supporting infrastructure, utilities, transportation routes and public services essential to a successful construction project. A project of this scale requires phasing over several years. To the extent that the SP outlines the order of public and private development and the threshold public and private improvements needed to support phased development plans, this plan meets the primary objective of the developer: a reliable plan for project phasing and improvements that can be achieved within pre-determined development standards and public infrastructure requirements.

3.3 PROJECT HISTORY

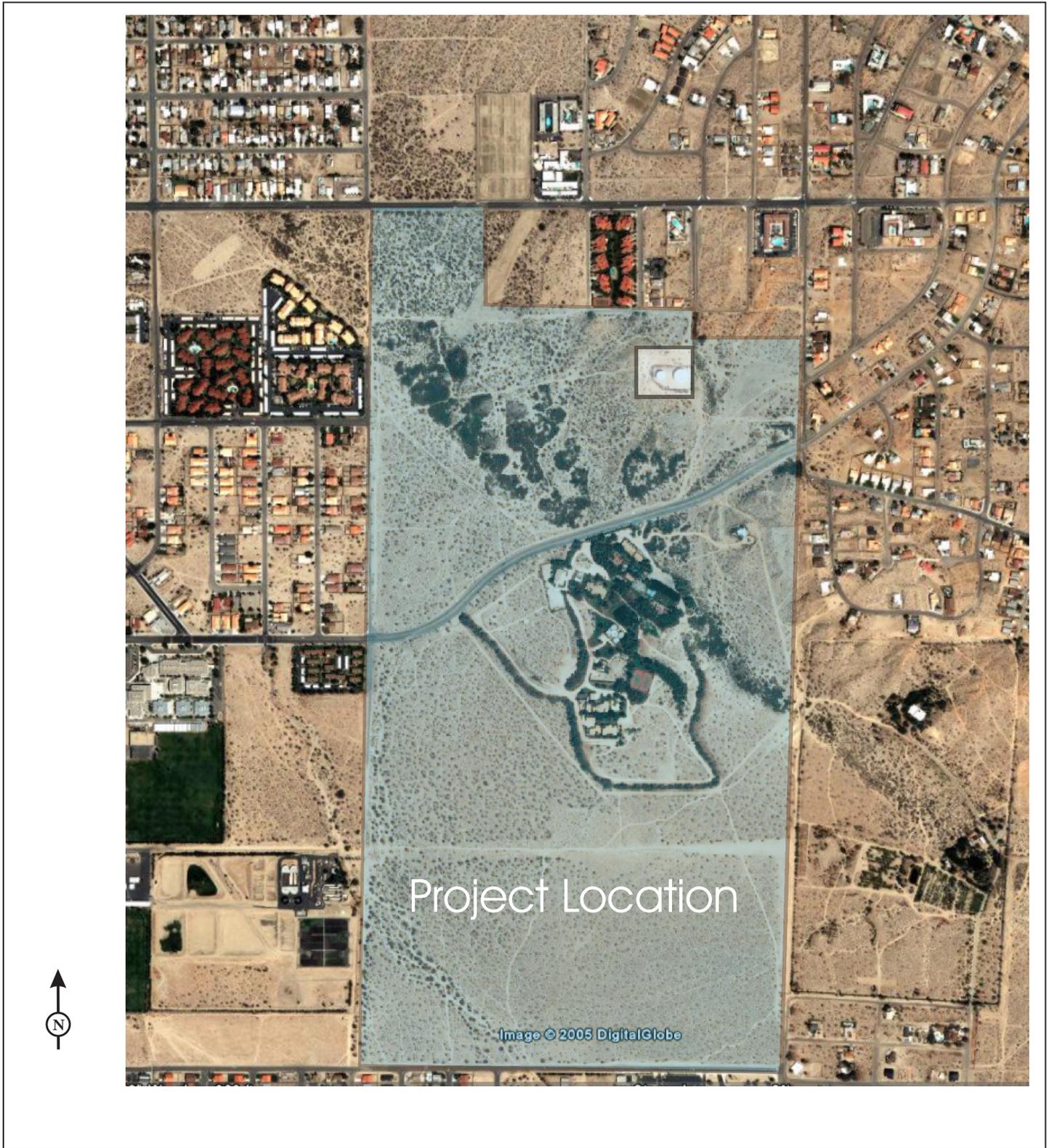
The existing resort has a rich architectural and cultural history. Its earliest structure designs feature extensive use of stuccoes and local rock walls, board and batten exteriors, privacy patios and verandahs, flat and barrel tile roofs, wooden and iron gates, stone columns and wainscot treatments, garden walls of rock and brick, walkways and patios of flagstone, multipane doors and windows, and lush landscaping. Rumored to have been built by Al Capone as a West Coast getaway, the site was originally developed in the 1920s and has long been a refuge for Hollywood celebrities. Highly renowned for its hot mineral springs, Two Bunch Palms Resort and Spa has been a desert oasis for the health-conscious for almost eighty years. The resort has a campus-like feel, with lodging and spa facilities positioned around the 60-acre resort compound.

Over the years, diverse architectural themes have appeared in added structures, compromising the cohesive ambiance of a more unified architectural theme. In some respects, the evolution of buildings on the property bespeaks a need to develop a plan for future architectural additions that will complement the best of Two Bunch Palms' early buildings and grounds designs.

3.4 PROJECT SITE CHARACTERISTICS

The project site ranges in elevation from 880 to 1,020 feet. The terrain is generally flat in the southwest and slopes more in the northeast. The approximately 285 gross-acre site is partially developed with the existing spa but otherwise is largely covered with scrub brush. A mix of urban development surrounds the site with the lowest-density and undeveloped land on the southeast side. An aerial photograph of the existing site appears in Figure 3.4-1.

The main constructed features of the site are Two Bunch Palms Trail and the Two Bunch Palms Resort and Spa. Two Bunch Palms Trail connects the southern segment of Palm Drive to Cuando Way and Hacienda Avenue. The existing Two Bunch Palms Resort and Spa covers fewer than twenty acres.



LSA

FIGURE 3.4-1

Two Bunch Palms Specific Plan EIR
Aerial Photo of Existing Site

SOURCE:GOOGLE EARTH, 2005

P:\TWO BUNCH PALMS\GRAPHIC\FIGURE 3.4-1 AERIAL PHOTOGRAPH

The principal roadway accessing the site is Two Bunch Palms Trail, which traverses the project from west to northeast about a third of the way from the northern boundary. Other existing roadways bordering the site include the following:

- To the south, Camino Campanero, two lanes wide
- To the north, Hacienda Avenue, a major improved thoroughfare
- To the west, Verbena Drive, a two-lane residential collector street
- To the east, Miracle Hill Road, a paved two-way street near the northern end of the property, serving primarily an adjacent residential neighborhood

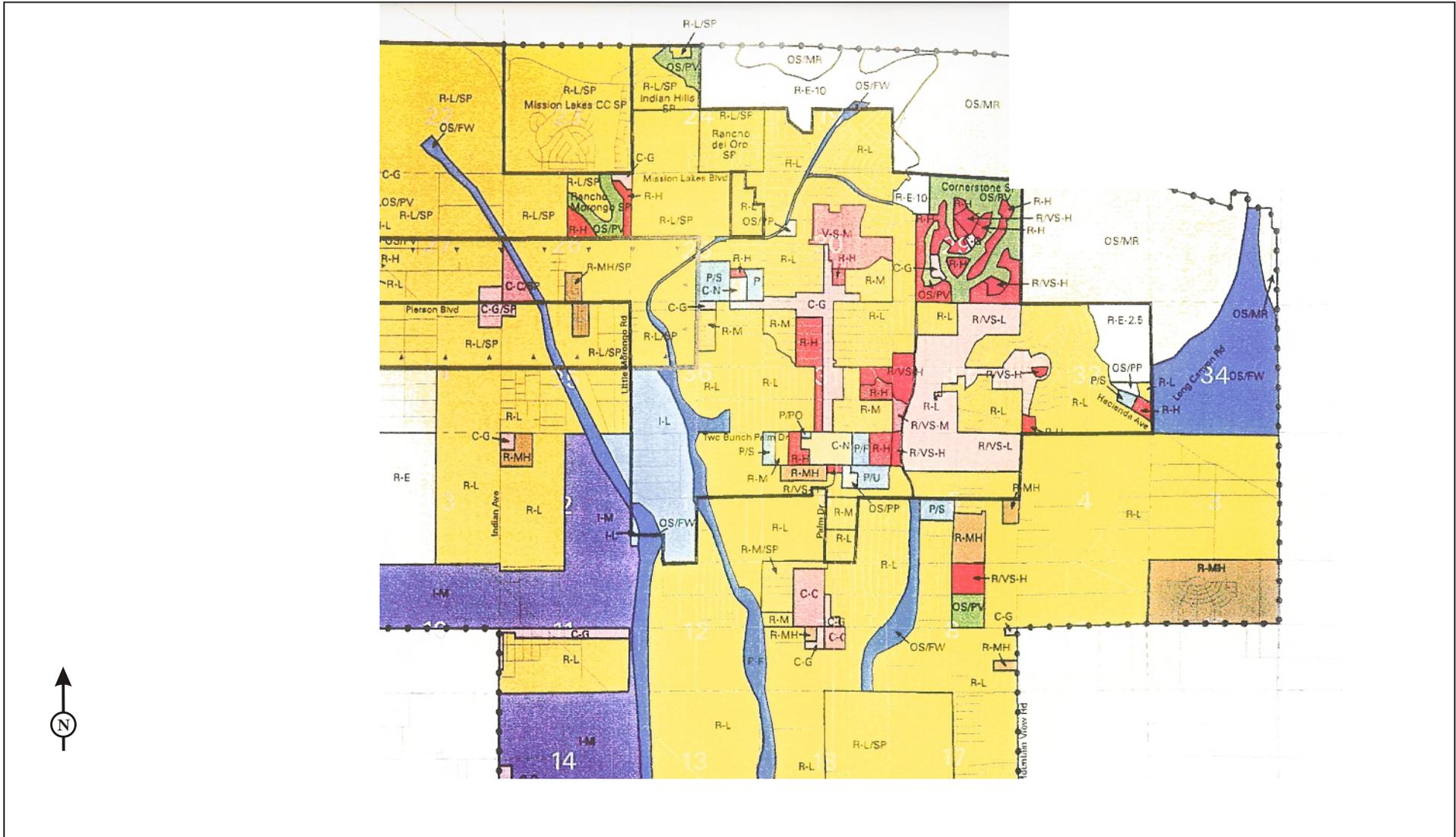
The project site is focused on the existing spa surrounded by undeveloped open desert land associated with the alluvial fan complex that emanates from the Little San Bernardino Mountains to the northeast of the site and spreads along the floor of the Coachella Valley. Alluvial fans are created over long periods of geologic time as waterborne sediments are eroded and conveyed from the mountains and deposited by gravity in a conical shape at lower elevations. A significant geological feature of the site is the fault scarp created by the Mission Creek Fault. This scarp traverses the site from northwest to southeast and is notable for the vegetation that appears where it traps groundwater. This vegetation consists mainly of creosote, mesquite, and other desert plants.

3.4.1 Surrounding Land Uses

The areas adjacent to the project site are primarily single-family residential neighborhoods. The Hidden Springs Country Club is southeast of the site, and an elementary school is located just across Camino Campanero. West of the resort along the south side of Two Bunch Palms Trail is a middle school, and other single-family neighborhoods surround the northern portion of the project interspersed with some undeveloped parcels. All of the surrounding neighborhoods are characterized mostly by one story, single-family residences on single-level building pads. The street system is generally rectilinear, with the longest blocks in a north-south direction. Miracle Hill to the east is about the most prominent developed area with no other notable owners adjoining.

3.4.2 Current City General Plan Land Use and Zoning Designations`

The current Desert Hot Springs General Plan was adopted in September 2000. The Hot Water Zoning Amendment (2004) is the most recent zoning for the project site. The land use designations for the area, as shown in Figure 3.4-2, are Low (R/VS-L), Medium (R/VS-M), and High Density (R/VS-H) Residential Visitor Serving. Surrounding land use designations are Low Density Residential to the north, east, and the south, and Medium to High Density Residential to the west. In 2005 the City modified its General Plan/Zoning map by creating a Two Bunch Palms Specific Plan Overlay District to permit the preparation and processing of a master plan for the subject site.



LSA

- RESIDENTIAL
- INDUSTRIAL
- COMMERCIAL
- INDUSTRIAL - LIGHT
- OPEN SPACE AND FLOODWAY
- RESIDENTIAL - HIGH/VISITOR SERVING
- OPEN SPACE

SOURCE: TERRA NOVA, 2000

FIGURE 3.4-2

Two Bunch Palms Specific Plan EIR
Existing City General Plan

3.4.3 Current City Zoning Designations

Desert Hot Springs zoning designations are the same as the General Plan designations.

3.5 PROPOSED PROJECT ELEMENTS

The proposed project involves the development of the approximately 285 gross-acre project site with 738 residential lots, 600 resort units (including 55 existing resort units), common areas, commercial center and interior streets. The interior streets will be privately maintained. The project is consistent with the City of Desert Hot Springs General Plan and Zoning Ordinance, and no text amendments to these documents are being requested for the overall project; however, map amendments are proposed for expansion of the Two Bunch Palms Specific Plan district to encompass an additional 10 acres in the Hacienda Neighborhood, and 2.35 acres in the Miracle Hill Neighborhood. Furthermore, the Specific Plan supercedes existing Zoning Ordinance development regulations. As such, several lot dimension/size variations are being requested. The proposed project involves the following primary discretionary actions by the City:

- Approval of the Specific Plan
- Approval of General Plan and Zoning Amendments to expand Two Bunch Palms Specific Plan Overlay District
- Approval of a Tentative Tract Map, which includes the following procedures:
 - Approval of preliminary grading plan
 - Approval of private street system
 - Approval of preliminary drainage plan

Each of these elements is described below.

3.5.1 Specific Plan

The project proposes 1,338 residential lots (600 visitor-serving and 738 residential) on approximately 285 gross acres for an average density throughout the project of 4.7 units to the acre, which conforms to General Plan and Zoning Ordinance standards. Commercial development and a retention basin are also proposed within the SP area. The Specific Plan provides the particular benefit of the development of consolidated standards to guide development in and around a 285-acre site that comprises the Two Bunch Palms ownership. The project also proposes a 121,500-square foot (sf) retail area including movie theaters, a small outdoor amphitheater, restaurants, retail uses, health and wellness facilities, and day spa. Two Bunch Palms, long known for its geothermal water resources, already includes several separate parcels with land uses and zoning designations ranging from Residential Visitor-Service/Low Density designations to Residential Low, Medium and High Density Land Uses.

In order to preserve and enhance the existing visitor uses of the site, as well as to maximize the economic development potential for the resort property, the City of Desert Hot Springs has set various developmental goals in the form of its General Plan, Zoning Regulations, Hot Water Zone Overlay Ordinance and other subdivision and building regulations. To be consistent with these goals, development must cater to residents of Desert Hot Springs and acknowledge the special hydrological characteristics of the site through sensitive design enhancement. The Specific Plan provides the

landowners and developers with an opportunity to translate those community goals into physical design. The Plan also sets out detailed steps connecting policy and development entitlements in order to insure that the highest-quality design solutions are applied to properties subject to the Specific Plan, which will be used to direct the processing and development of individual projects within its area. Because the subject area is large, multiple owners likely will pursue various allowable projects, rather than a single developer developing the entire site. For this reason, and to provide a stable pattern for build-out of the site, the Specific Plan will consolidate all applicable City policies and regulations concerning development within the Two Bunch Palms Specific Plan area, and it will outline architectural expressions on the subject site by presenting concepts for residential and resort buildings, grading and land form concepts, landscaping treatments, pedestrian corridors, street furniture and lighting, and project signage.

3.5.2 Tentative Tract Map

The project proposed by the applicant includes a Tentative Tract Map (Vesting Tentative Tract Number 34522), as shown in Figure 3.5-1. The Tentative Tract Map (TTM) identifies the proposed configuration of 738 single-family lots and 600 resort lots/units on 285 gross acres, each lot's building pad and pad elevation, along with the proposed infrastructure, internal street pattern and representative street sections. The project also includes the dedication of public streets.

The following sections describe the main components of the proposed project as shown on the Tentative Tract Map.

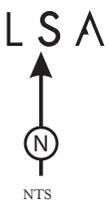
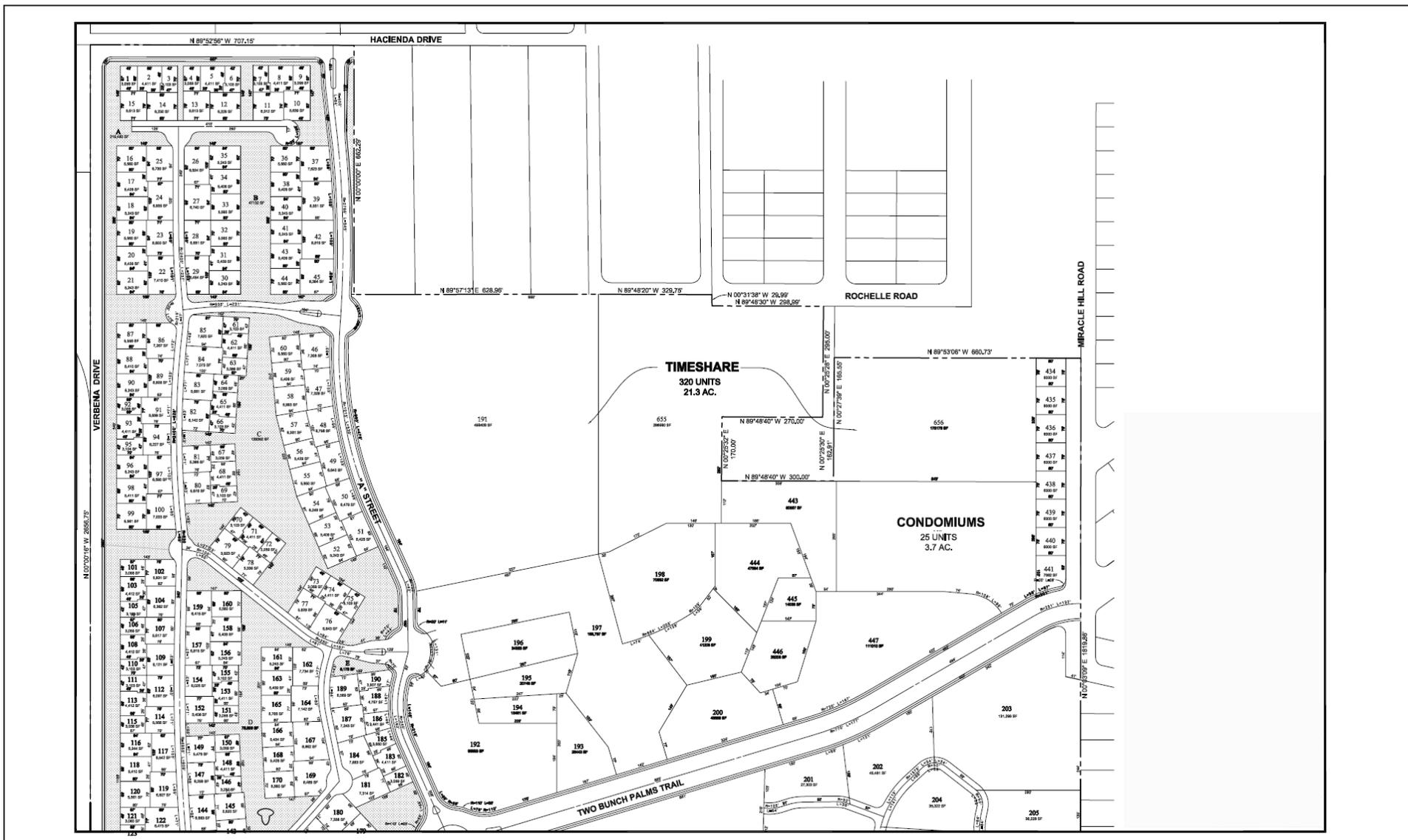


FIGURE 3.5-1

Two Bunch Palms EIR

Two Bunch Palms Tenative Tract Maps

SOURCE: EDA

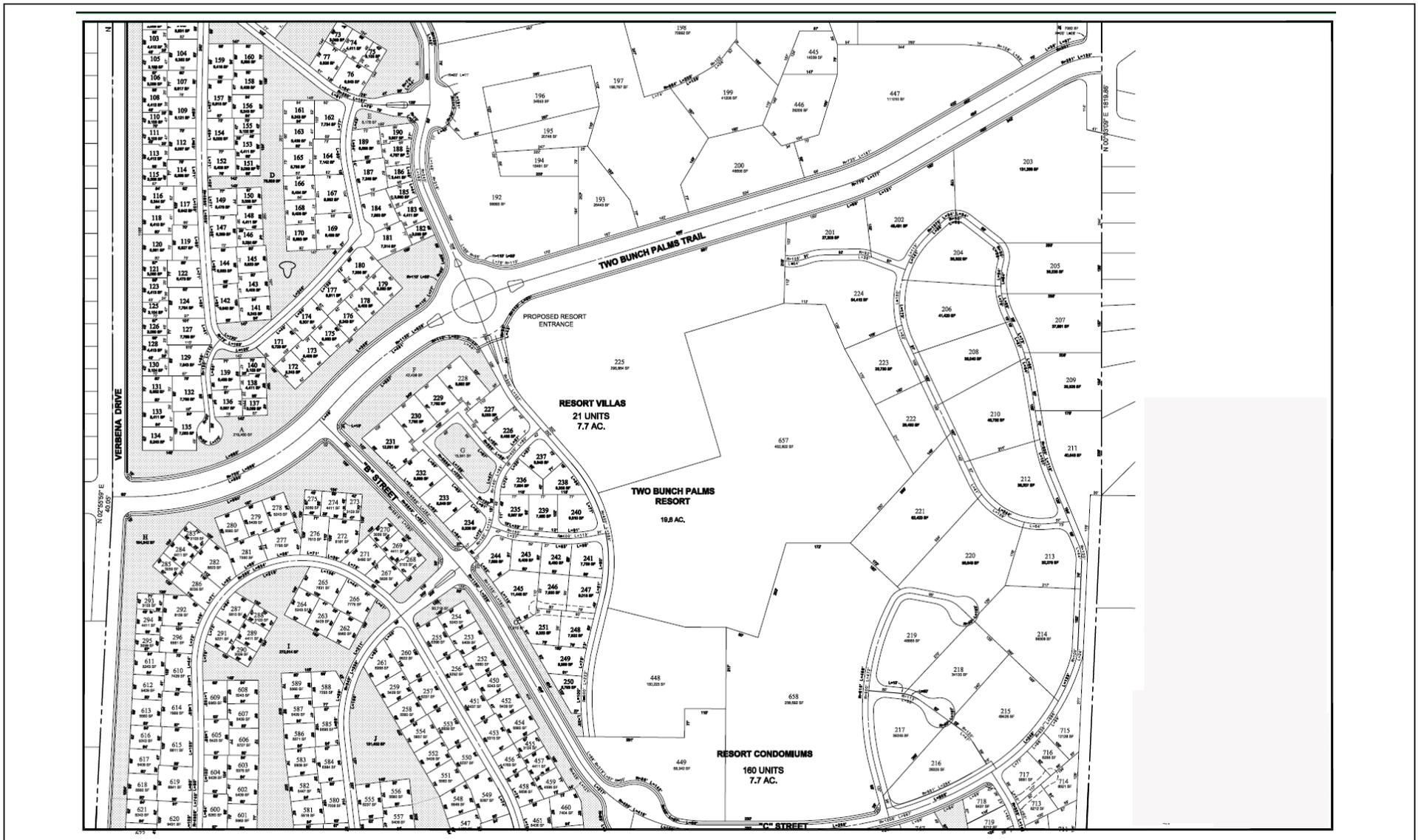
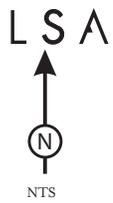


FIGURE 3.5-2



Two Bunch Palms EIR

Two Bunch Palms Tentative Tract Maps

SOURCE: EDA

3.5.3 Residential and Open Space

As explained above (Section 3.5.1 Specific Plan), the proposed project includes 20 acres of retail uses, 19.6 acres of resort area, 42 acres of resort condos and villas, and 20 acres of timeshare units, with the remainder of the 285 acres devoted to single-family residences, streets, common areas and retention basins. The project will subdivide its site into a total of 1,338 single-family residential lots plus a 121,500-sf retail area. Residential lot sizes shown on the TTM range from 1,200-6,000 sf, fairly small by local standards, but these lot sizes reflect the more condominium-style and cluster-planned unit development arrangement of the various project sectors and do not include the generous common space areas. In accordance with the requirements of Government Code Section 66477, the Quimby Act, the development will mitigate park and recreation impacts by paying parkland fees or dedications prior to issuance of residential building permits. The parkland mitigation amount will be based upon applicable ordinance (parkland acquisition and improvements costs).

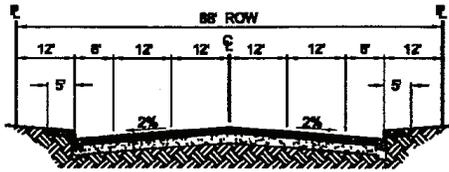
3.5.4 Vehicular Circulation

Palm Drive, a General Plan-designated major collector (and major arterial south of Two Bunch Palms Trail), is west of the project and one of the primary thoroughfares linking Desert Hot Springs to Interstate 10 (I-10) south of the City; Palm Drive is one of the General Plan's two designated regional roadways. Two Bunch Palms Trail, another major collector, traverses the project site and provides the primary access to Palm Drive. Hacienda Drive, another major arterial for the City is on the north side of the project.

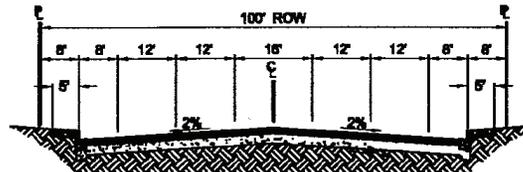
The proposed internal street system is designed to connect to the existing area roadways. The primary project entrance will be via Two Bunch Palms Trail. At the northern edge of the project, Rochelle, Hacienda, and Verbena will provide access to the project. New access to the southern edge of the development will be provided by Camino Campanero.

The project's internal street system will have a curvilinear design compatible with the existing meandering pattern of Two Bunch Palms Trail. The blocks in the southern portion of the site, although curvilinear, are generally longer in a north-south pattern that resembles the more rectilinear patterns of the surrounding area.

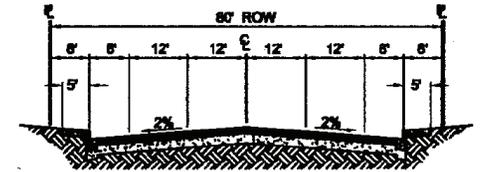
All interior streets will be privately maintained by the project Homeowners Association. In order to allow through public access across the private streets, the City will require a non-exclusive easement.



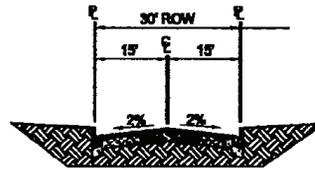
TYPICAL ROAD SECTION: HACIENDA DRIVE
NOT TO SCALE



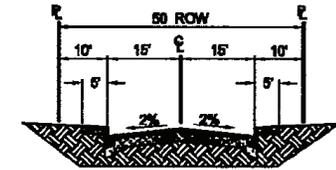
TYPICAL ROAD SECTION: TWO BUNCH PALMS TRAIL
NOT TO SCALE



TYPICAL ROAD SECTION: VERBENA DRIVE
NOT TO SCALE



TYPICAL STREET SECTION: LOCAL RESIDENTIAL
NOT TO SCALE



TYPICAL STREET SECTION: "A" STREET
NOT TO SCALE

LSA

FIGURE 3.5-4

SOURCE: EDA

Two bunch Palms
Street Sections

3.5.5 Pedestrian Access

The project proposes no traditional sidewalks inside the project, and local residents will utilize the interior private street system and pathway network for pedestrian circulation.

3.5.6 Site Grading

Cut-and-fill depths vary over the project site. It is anticipated that cut/fill will be at least moderate in the southwestern two thirds of the project. Walls and entries will be themed (rock and stone, wrought iron) to match the fencing and wall details of the Specific Plan.

3.5.7 Drainage Improvements

The project is located predominantly within Flood Zone B as shown on the Flood Insurance Rate Maps (FIRMs) prepared by the Federal Emergency Management Agency. Flood Zone B is the designation for areas between the 100-year and 500-year flooding limits where average flood depths are less than one foot. A small portion of the eastern edge of the project site falls within Zone X, which is outside the 500-year flood plain. There is, however, a section near the southwest corner of the project area that falls within Flood Zone AO, a 100-year shallow flooding designation. This area will remain undeveloped as a 17-acre retention basin.

The tentative plan for the storm drain design will be submitted with the VTTM submittal. Currently, a storm drain in the Two Bunch Palms Trail right-of-way provides the basic engineered flood protection for the site and other developments in the area. This drain captures flows from Two Bunch Palms as far north as Third Street. This drainage continues southeast along natural topographical lines to intersect with Desert Hot Springs Creek.

According to the FIRM maps, areas downstream from the project are not fully protected at the 100-year-flood level, which has a 1% statistical chance of occurring in any given year. Under federal and State law, no new development project may exacerbate downstream flood conditions. In order to accommodate storm flows, new developments replace existing open ground with impervious surfaces (homes, pools, and roads) that reduce absorption during flood events and thereby increase downstream flows.

Thus, any new project must mitigate for the increase in downstream flows. The proposed project will do so by constructing retention basins to act as holding ponds or lakes to store storm flows in excess of the pre-development rate until the flows are absorbed into the soil or can be released downstream at the pre-development rate.

To ensure flood protection, the proposed project includes a series of drainage improvements to be developed along with new pumping facilities to tap the artesian water on site and, essentially, to create an on-site water recirculation system that will allow the mineral waters to percolate back into the ground. With fault source water pressure so near the project, the percolated water should commingle smoothly back into the tapped source.

3.5.8 Architectural Concept

The architectural concept for the project proposes energy-efficient, one- and two-story residential and visitor units as well as two- and three-story condominium and timeshare units. The styles of these smaller units will follow those of the project homes and visitor bungalow units.

All perimeter walls and view fences along with front yard, rear yard and common area landscaping and pools will be installed by the builder, assuring architectural and landscape compatibility and consistency in design and materials throughout the project.

Due to the long construction history at the site, as noted above (Section 3.3 Project History), the existing buildings at Two Bunch Palms are in a wide range of architectural styles rendered largely in locally-derived wood, stone, and clay. In keeping with this tradition, the project proponent's conceptual plan features unique designs derived from the Organic Style advocated in the past by Frank Lloyd Wright and Bruce Goff, and more recently by Bart Prince and Herb Green. Generally, the strongest examples of the Organic Style are found in the Midwest and southern Plains states, but characteristic components of the style were adopted by some of the world-class architects of the Coachella Valley's mid-century modern movement, such as Albert Frey and E. Stewart Williams. To make the proposed project's designs more site-specific, the conceptual renderings indicate the use of stone for cladding, a building material common to the area. The most notable feature of the Organic Style, its strong use of geometry, is clearly evident in the project's wellness center rendering, which shows a complex roofline and numerous angles. The conceptual renderings displayed in the Specific Plan also show the Organic Style water theme incorporated into the overall landscape design through the use of buildings as bridges over streams.

3.5.9 Project Construction/Phasing

To prepare the site for construction, grading will begin 2007 and last about eight months. The project will continue through three phases, with the largest portion, or approximately half of all development, front-loaded in 2007–2008. An additional quarter of the project will be built in 2008–2009, and the final quarter, constituting Phase 3, will be built in 2009–2010.

Construction vehicles will access the site via Two Bunch Palms Trail from the west. Approximately 80 acres of the site will be graded at any particular time.

3.5.10 Homeowners Association (for Residents' and Visitors' Units)

A project Master Resort Property and Homeowners Association (MPOA) will be established under current State laws, and the MPOA will maintain the following facilities: private streets, retention basins, other common areas and landscaping. The City Attorney and Planning Staff will review the proposed MPOA Covenants, Codes and Restrictions (CC&Rs) for adequacy and completeness. The CC&Rs will outline the responsibilities of the MPOA, which also will manage any residential units included in the resort's rental pool for short-term (transient visitors') stays. Transient Occupancy Taxes (TOT), or fees in lieu thereof, will be collected and paid to the City per the City's standard collection practices, thus unifying management of the visitor units and simplifying TOT collection.

3.5.11 Utilities

Sewer. Sewer service will be provided by MSWD. The project proposes sewer lines within private streets to collect waste water from the buildings on site. Public utility easements will be granted over sewer lines within the project to provide MSWD with access and maintenance rights over its lines. The on-site sewer system serving building lots is designed for gravity flow.

Water. Water service will be provided by MSWD. The project proposes water lines within private streets to deliver water to the homes on site. Public utility easements will be granted over water lines within the project to provide MSWD with access and maintenance rights over its lines, so water is available at the project, and no offsite waterline extensions are required.

Electricity. Electricity will be provided by Southern California Edison (SCE). Electrical distribution lines will be underground. The service will connect to existing SCE lines.

Natural Gas. Natural gas will be provided by The Gas Company/Sempra Energy. The project proposes to tap into existing natural gas lines.

Telephone. Telephone service will be provided by Verizon. The project proposes to connect to existing telephone facilities.

3.6 OWNERS PARTICIPATION AGREEMENT

An Owners Participation agreement (OPA) is proposed in order to reflect a commitment between the development interests and the City to the planned and predictable development of the Two Bunch Palms Specific Plan sites. The OPA provides a phasing plan that distinguishes the timing of private and public infrastructure investments to be installed in order to accommodate the TBP development as it builds out. Construction is timed to meet these infrastructure investments so that adequate public services are provided as development requires them. The OPA provides a financing plan that obligates the developer to install infrastructure that will benefit other surrounding landowners; the OPA also provides a mechanism for the developer to request reimbursements from other benefiting landowners/developers as they use project improvements.

Additionally, the OPA guarantees a 10-year timeframe for the completion of the improvements of the Specific Plan. In effect, the City will issue the permits for the Specific Plan for a period of no less than ten years and, according to its provisions, possibly longer, given mutually agreed-upon extensions of the OPA.

3.8 INTENDED USES OF THIS EIR

This EIR is intended as the environmental information for the following approvals by the City of Desert Hot Springs:

- Approval of Specific Plan
- Owners Participation Agreement
- General Plan and Zoning Map Amendment for addition to Two Bunch Palms Specific Plan Overlay District
- Design Review
- Approval of Tentative Tract Map, which procedure includes the following:
 1. Approval of a preliminary grading plan
 2. Approval of a private street system
 3. Approval of a preliminary drainage plan
 4. Approval of preliminary utilities plan

4.0 ENVIRONMENTAL EVALUATION

The analysis of the potential impacts of the proposed Two Bunch Palms SP project is based in part on the following:

1. *Comprehensive General Plan for the City of Desert Hot Springs (2000).*
2. *EIR for the City of Desert Hot Springs Comprehensive General Plan (2000).*
3. *California CEQA Guidelines (Revised 2005)*

4.1 INTRODUCTION

This section describes the environmental setting of the project area, the potential short and long term adverse and beneficial effects of the proposed Two Bunch Palms Specific Plan (SP) project, and mitigation measures proposed to reduce adverse project impact levels.

Environmental impacts are measured by comparing the forecast conditions after implementation of a project against conditions in the environmental baseline. Under the California Environmental Quality Act (CEQA), the normal baseline for assessing the extent of the environmental impacts of an action is the existing condition at time of issuance of the Notice of Preparation (NOP). The NOP for the proposed Two Bunch Palms SP project was issued by the City of Desert Hot Springs on May 31, 2006. That date was used as the environmental baseline for the analysis of the potential impacts of the proposed Two Bunch Palms SP project.

Under CEQA, an impact is deemed potentially significant if the difference between the baseline conditions and future conditions with the project exceeds an adopted standard of significance. The City of Desert Hot Springs uses Appendix G of the *CEQA Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines)*, and the CEQA implementation guidelines of the City of Desert Hot Springs as its standards of significance. This Environmental Impact Report (EIR) also uses mitigation measures identified in the City of Desert Hot Springs General Plan EIR (Terra Nova Planning & Research, June 1, 2000) as additional guidance in interpreting the *Guidelines* in the local instance. For certain environmental topics such as air quality this EIR uses significance standards established by agencies with expertise in those areas. Each of the following sections describes the standards of significance used in the analysis of impacts of the proposed Two Bunch Palms SP project.

For each environmental resource category, this EIR provides the following information:

1. The existing condition/environmental baseline for the resource.
2. The standards of significance for impacts to that resource.
3. The impacts of the proposed Two Bunch Palms SP project (the difference between the baseline conditions and forecast conditions with the project) compared to the standards of significance in

order to identify potentially significant adverse and beneficial, and short-term and long-term impacts.

4. For each potentially significant adverse impact of the proposed Two Bunch Palms SP project, feasible mitigation measures to avoid or substantially reduce the adverse impacts.
5. The impacts of the project after implementation of the mitigation measure(s) are reassessed. Any remaining significant adverse impact is identified as a potentially significant unavoidable adverse effect of the proposed Two Bunch Palms SP project after mitigation.

4.2 AESTHETICS

The analysis of the potential impacts of the proposed Two Bunch Palms SP project related to aesthetics is based in part on the following:

1. *Two Bunch Palms Specific Plan* (2006)

References 1 through 4 are on file and available for review at the City of Desert Hot Springs.

4.2.1 Existing Setting

The immediate vicinity of the project site is a mix of desert land and urbanized development, with elevations decreasing toward the southwest and increasing to the north and east. Most of the surrounding urbanized development is single-family residential, with a school to the west. Sand-covered vacant desert land comprises the visual environment of the project site, with the exception of the existing Two Bunch Palms Resort and Spa on a small portion of the property.

The *EIR for the City of Desert Hot Springs Comprehensive General Plan* describes the visual setting of the City as follows:

One of the Coachella Valley's most important assets is its exceptional mountain and open space views. The Coachella Valley and the City of Desert Hot Springs are located within a low desert trough or basin, created by tectonic forces. Seismic activity continues to spread the valley floor while raising the surrounding terrain to form the San Jacinto, Santa Rosa, San Bernardino and Little San Bernardino Mountain ranges... The eastern portion of the City consists largely of developed lands on terrain that slopes gently to the southeast.
(III.132-134)

4.2.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have a substantial adverse effect related to aesthetics if it will:

- a) *Have a substantial adverse effect on a scenic vista*
- b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway*

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings*
- d) *Create a new source of substantial light or glare that will adversely affect day or nighttime views in the area*

4.2.3 Project Impacts

The *EIR for the City of Desert Hot Springs Comprehensive General Plan*, pages III-134 through III-135, identifies the visual impacts of the implementation of the General Plan as follows:

Implementation of the proposed General Plan will have generally limited impacts on the visual resources within the City and its sphere-of-influence. Development facilitated by the Plan will be largely limited to low- and medium- density, low-profile structures. Much of this development will occur in and immediately around existing development in the City and will be consistent with the existing urban character of the community. A number of low-density residential sites will be located within master planned communities and will benefit from consolidated open space lands, prescribed architectural themes, and consistent and limited building heights. Regardless of the type of development, new structures, signage and parking lots will contribute to visual impacts to motorists and surrounding properties. The General Plan addresses these potential impacts through a series of policies and programs that either regulate development directly or mandate the development of zoning and other regulating codes that assure detailed staff review and analysis and discretionary approval of building heights and other design features.

Light and Glare. New structures in this and other areas will create increased light and glare resulting from residential, commercial. Increased traffic will generate additional headlights and lighting levels on local roadways. All of these potential impacts can be effectively mitigated through thoughtful project design.

As shown in the proposed Two Bunch Palms SP, residential uses will be the predominant building type within the project area. However, new resort and other commercial uses will be built along Two Bunch Palms Trail and will add a positive element of diversity to the visual landscape. Given the project's compatibility with the current general plan, aesthetic alterations to the landscape resulting from project construction will also be consistent with the aesthetic impacts associated with implementation of the general plan.

Because the proposed Two Bunch Palms SP project is consistent with the General Plan review of visual impacts, the following analysis assesses project consistency with the General Plan mitigation measures. This analysis is sufficient to address the potential impacts of the proposed Two Bunch Palms SP project related to aesthetic resources.

4.2.4 Summary of Impacts

Implementation of the Two Bunch Palms SP project, without mitigation, will result in the following potentially significant adverse effects on aesthetics in the long term.

- IMPACT AES-1** Water wells and reservoirs may potentially adversely impact scenic viewsheds.
- IMPACT AES-2** The land uses on the project site may result in potential adverse impacts relating to light impacts on night skies and potential adverse impacts of nighttime illumination in residential areas.
- IMPACT AES-3** The land uses on the project site under the proposed Two Bunch Palms SP project may include signage that adversely impacts scenic viewsheds.
- IMPACT AES-4** The reduced building setbacks as set forth in the SP related to the proximity of buildings to the street will have an aesthetic impact.
- IMPACT AES-5** Grading related to project development may result in detrimental impacts to visual aesthetics in the project area.
- IMPACT AES-6** Some buildings proposed within the SP area will be significantly taller than existing buildings in the area and thus would have a considerable visual impact.

4.2.5 Mitigation Measures

- MM AES-1** Prior to design review approval, the project applicant will prepare, and the City of Desert Hot Springs will review and approve a screening design for water wells and storage reservoirs.
- MM AES-2** The Director of Planning shall review and ensure that the lighting plan, to be included in the SP, meets the requirements of the City's Lighting Standards that include as a minimum the following requirements:
1. All public walkways will be illuminated with light standards appropriately spaced and no more than four feet in height.
 2. Waterway and park areas will be illuminated with light standards that are appropriately spaced and no more than 18 feet in height. All light standards will be equipped with glare shields to aim all light towards the ground.
 3. Private streets will not have street lighting.
 4. Commercial lighting will be turned off after 10:00 pm except for security lighting, and all light standards will be equipped with glare shields to aim all light at the ground.
- MM AES-3** Prior to the issuance of any building permit, a sign program addressing both the residential and commercial components of the project shall be approved by the Planning Commission.
- MM AES-4** A private landscape buffer will be incorporated where the project abuts public streets.

MM AES-5 Prior to the approval of tentative tract map the Director of Planning shall review grading plans, including retaining walls and areas of cut and fill.

MM AES-6 Any two-story development within the SP area shall undergo design review of floor plans, site plan, and elevations by the Planning Commission.

4.2.6 CEQA Level of Significance after Mitigation

Mitigation Measure AES-1, requiring the use of screening for these utility and services facilities, will minimize these project impacts to scenic viewsheds to below a level of significance.

Mitigation Measure AES-2, requiring development of a lighting plan that contains the above measures and meets the requirements of the City's Lighting Standards, will minimize the adverse project light impacts to night skies and residential uses to below a level of significance.

Mitigation Measure AES-3, which requires development of a signage plan that complies with the City's Signage Regulations in the Zoning Ordinance, will minimize the adverse project impacts related to signing to below a level of significance.

Mitigation Measure AES-4, which mandates review of grading plans prior to approval of tentative tract map, will minimize the adverse project impacts below a level of significance.

Mitigation Measure AES-5, which mandates review of grading, including retaining walls and areas of cut and fill, prior to tentative tract map approval will minimize the adverse project impacts below a level of significance.

Mitigation Measure AES-6, which mandates design review for any two-story development within the SP area, will minimize the adverse project impacts related to aesthetics that may result from such development below a level of significance.

Once implemented, these mitigation measures will reduce the adverse project impacts on scenic viewsheds, night skies and lighting impacts in residential areas below a level of significance.

4.3 AGRICULTURE

4.3.1 Setting

Existing Agricultural Land Use. The project site is currently a mix of developed resort area and undeveloped desert area. No agricultural uses have occupied the site during its historic period.

Surrounding Agricultural Land Uses. There are no other agricultural uses in the immediate area surrounding the project. The project site is in the central, generally urbanized portion of the City of Desert Hot Springs, where agriculture has not been a traditional activity.

4.3.2 Thresholds of Significance

Appendix G of the *CEQA Guidelines* assesses impact on agriculture resources according to whether the proposed project will have any of these consequences:

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.*
- b) *Conflict with existing agricultural use, or a Williamson Act (agricultural preserve) contract (Riverside County Agricultural Land Conservation Contract Maps).*
- c) *Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Riverside County Ordinance No. 625 "Right-to-Farm").*
- d) *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.*

In addition to the above, a conflict with the policies contained in the City of Desert Hot Springs General Plan is considered a significant adverse effect.

4.3.3 Impacts of the Proposed Project

The project will permanently convert the site from vacant land to non-agricultural land uses. However, the project site is not in a designated agriculture zone, so the project will have no such impact.

Prime Farmland. Conversion of prime farmland to non-agricultural use is considered a significant adverse impact under the CEQA guidelines. However, the site is not designated prime farmland, so there will be no such impact.

Conflict with Existing Agricultural Use. The Williamson Act of 1965 was enacted, and has since been expanded, as a means of preserving agricultural lands and other forms of open space from encroaching urbanism by allowing local governments to establish preserves. The proposed project site

is not currently farmed or located in a Williamson Act Preserve or a Riverside County Agricultural Land Conservation Contract Map, so the project will have no such impact.

Conflict with Adjacent Agricultural Uses. Because the project is not adjacent to any existing agricultural uses on any side, it will have no impact in this category.

Cause Additional Conversion of Agricultural Lands. The project will not affect the availability of agricultural water or other needs of any nearby agricultural lands. But the economic success of the project, along with other planned non-agricultural uses in the broader area, could encourage agricultural landowners to seek agricultural conversion; however, the County's General Plan (where such lands are located) already envisions such conversion, so each project will need to seek its own discretionary approvals. Thus, the proposed project will not by itself cause additional conversion of agricultural lands, and impacts are considered less than significant.

4.3.4 Summary of Impacts

The proposed project will have no significant impact on agricultural lands.

4.3.5 Potential Mitigation Measures

No mitigation measures are required.

4.3.6 Level of Significance after Mitigation

There are no significant impacts to be mitigated.

4.4 AIR QUALITY

This analysis of the potential impacts of the proposed Two Bunch Palms SP project related to air quality is based in part on the following:

1. *Two Bunch Palms Specific Plan (2006)*
2. *Two Bunch Palms Specific Plan Air Quality Analysis (LSA, March 2006)*

4.4.1 Existing Setting

Regional Air Quality and Climate/Meteorology. The project site is located in the City of Desert Hot Springs in Riverside County, within the Coachella Valley Planning Area, in the Salton Sea Air Basin (SSAB) that was part of the Southeast Desert Air Basin (SEDAB). This part of the SSAB is currently under the jurisdiction of the SCAQMD. Therefore, the impact analysis contained in this section was prepared in accordance with the methodologies provided by the SCAQMD in its 1993 *California Environmental Quality Act (CEQA) Air Quality Handbook* for the SEDAB area and the Caltrans Transportation Project-Level Carbon Monoxide Protocol (Caltrans, December 1997).

Both the State and federal governments have established health-based Ambient Air Quality Standards (AAQS) for criteria air pollutants. These pollutants are CO, ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and suspended particulate matter (PM₁₀, PM_{2.5}). Table 4.4-A, below, shows the current attainment status in the Coachella Valley area.

Table 4.4-A: Salton Sea Air Basin Attainment Status

Pollutant	State	Federal
O ₃ 1-Hour	Nonattainment	Revoked in June 2005
O ₃ 8-Hour	Not Established	Serious Nonattainment (2013)
PM _{2.5}	Attainment/Unclassified	Attainment/Unclassified
PM ₁₀	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Unclassified
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment/Unclassified
Pb	Attainment	Attainment/Unclassified
All others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB Web site: www.arb.ca.gov

Table 4.4-B shows both federal and State standards for these criteria pollutants. Table 4.4-C lists the sources, primary health effects, and status of meeting the standards of these six criteria air pollutants.

These health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. The State AAQS are more stringent than the federal AAQS.

Table 4.4-B: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹		Federal Standards ²		
		Concentration ³	Method ⁴	Primary ^{2,5}	Secondary ^{2,6}	Method ⁷
Ozone (O ₃)	1-Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (157 µg/m ³) *		0.08 ppm (157 µg/m ³) ⁸		
Respirable Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation*	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		50 µg/m ³		
Fine Particulate Matter (PM _{2.5})	24-Hour	No Separate State Standard		65 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation*	15 µg/m ³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Nondispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Nondispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		–		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	–	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (470 µg/m ³)		–		
Lead (Pb)	30-day average	1.5 µg/m ³	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m ³	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 µg/m ³)	–	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	–	
	3-Hour	–		–	0.5 ppm (1300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m ³)		–	–	
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ⁹	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: ARB (May 2005)

Footnotes:

- ¹ California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1- and 24-hour); nitrogen dioxide; suspended particulate matter, PM₁₀; and visibility-reducing particles are values not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
 - ² National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency (EPA) for further clarification and current federal policies.
 - ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25° C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25° C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
 - ⁴ Any equivalent procedure that can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
 - ⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
 - ⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
 - ⁷ Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.
 - ⁸ New federal eight-hour ozone and fine particulate matter standards were promulgated by EPA on July 18, 1997. Contact EPA for further clarification and current federal policies.
 - ⁹ The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- * This concentration was approved by ARB on April 28, 2005, and is expected to become effective in early 2006.

Table 4.4-C: Health Effects Summary of the Major Criteria Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O ₃)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	Aggravation of respiratory and cardiovascular diseases Irritation of eyes Impairment of cardiopulmonary function Plant leaf injury
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust High temperature stationary combustion Atmospheric reactions	Aggravation of respiratory illness Reduced visibility Reduced plant growth Formation of acid rain
Carbon Monoxide (CO)	Incomplete combustion of fuels and other carbon containing substances, such as motor exhaust Natural events, such as decomposition of organic mater	Reduced tolerance for exercise Impairment of mental function Impairment of fetal development Death at high levels of exposure Aggravation of some heart diseases (i.e., angina)
Particulate Matter (PM ₁₀ and PM _{2.5})	Stationary combustion of solid fuels Construction activities Industrial processes Atmospheric chemical reactions	Reduced lung function Aggravation of the effects of gaseous pollutants Aggravation of respiratory and cardiorespiratory diseases Increased cough and chest discomfort Soiling Reduced visibility
Sulfur Dioxide (SO ₂)	Combustion of sulfur-containing fossil fuels Smelting of sulfur-bearing metal ores Industrial processes	Aggravation of respiratory diseases (asthma, emphysema) Reduced lung function. Irritation of eyes Reduced visibility Plant injury Deterioration of metals, textiles, leather, finishes, coatings, etc
Lead (Pb)	Contaminated soil	Impairment of blood function and nerve construction Behavioral and hearing problems in children

Source: ARB 2002

The SSAB portion of Riverside County is separated from the South Coast Air Basin region by San Jacinto Mountains and from the Mojave Desert Air Basin (MDAB) region by Little San Bernardino Mountains.

During the summer the SSAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The SSAB is rarely influenced by cold air masses moving south from Canada and Alaska because these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The SSAB averages between three and seven inches of precipitation per year.

The nearest meteorological station that monitors temperature is the Palm Springs Station.¹ The monthly average maximum temperature recorded at this station in the past 78 years ranged from 69.5.0°F in January to 108.3°F in July, with an annual average maximum of 88.7°F. The monthly average minimum temperature recorded at this station in the past 68 years ranged from 42.1°F in January to 74.8°F in July, with an annual average minimum of 57.0°F. January is typically the coldest month, and July is typically the warmest month in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers along the coastal side of the mountains. Average monthly rainfall measured at the Palm Springs Station during that period varied from 1.16 inches in January to 0.47 inch or less between April and November, with an annual total of 5.55 inches.

4.4.2 LOCAL AIR QUALITY

The SCAQMD, together with the ARB, maintains ambient air quality monitoring stations in the Coachella Valley Area. The Palm Springs air quality monitoring station monitors five of the criteria pollutants: O₃, NO₂, CO, PM₁₀, and particulate matter less than 2.5 microns in diameter (PM_{2.5}). The closest monitoring station with SO₂ data is the Riverside-Rubidoux station. Air quality trends identified from data collected at both air quality monitoring stations from 2003 to 2005 are listed in Table D and are discussed below. From the ambient air quality data listed, it can be seen that CO, PM_{2.5}, NO₂, and SO₂ levels have not exceeded the relevant federal or State standards in the past three years.

O₃ exceeded the State one-hour standard from 36-54 days during the past three years and exceeded the federal one-hour standard for 1-4 days during the past three years. O₃ exceeded the federal eight-hour standards from 32-43 days during the past three years. The 24-hour PM₁₀ levels exceeded State standards from 2-4 days during the past three years. However, the federal 24-hour PM₁₀ standards have not been exceeded during the past three years.

¹ Western Regional Climate Center Web site, www.wrcc.dri.edu

Table 4.4-A: Ambient Air Quality at the Palm Springs Air-Monitoring Station

Pollutant	Standard	2003	2004	2005
Carbon Monoxide				
	Maximum 1-hr concentration (ppm)	3.3	2.1	2.1
No. days exceeded:	State: > 20 ppm/1-hr	0	0	0
	Federal: > 35 ppm/1-hr	0	0	0
	Maximum 8-hr concentration (ppm)	1.3	0.8	0.6
No. days exceeded:	State: ≥ 9 ppm/8-hr	0	0	0
	Federal: ≥ 9 ppm/8-hr	0	0	0
Ozone				
	Maximum 1-hr concentration (ppm)	0.141	0.125	0.139
No. days exceeded:	State: > 0.09 ppm/1-hr	54	36	40
	Maximum 8-hr concentration (ppm)	0.110	0.106	0.116
No. days exceeded:	Federal: > 0.08 ppm/8-hr	43	32	34
Particulates (PM₁₀)				
	Maximum 24-hr concentration (µg/m ³)	108	79	66
No. days exceeded:	State: > 50 µg/m ³	4	2	ND ²
	Federal: > 150 µg/m ³	0	0	0
	Annual arithmetic average concentration (µg/m ³)	27	26	ND
Exceeded:	State: > 20 µg/m ³ annual avg.	Yes	Yes	ND
	Federal: > 50 µg/m ³ annual avg.	No	No	ND
Particulates (PM_{2.5})				
	Maximum 24-hr concentration (µg/m ³)	21.2	27.1	26.1
No. days exceeded:	Federal: > 65 µg/m ³	0	0	0
	Annual arithmetic average concentration (µg/m ³)	9	8.9	ND
Exceeded:	State: > 12 µg/m ³ annual avg.	No	No	ND
	Federal: > 15 µg/m ³ annual avg.	No	No	ND
Nitrogen Dioxide				
	Maximum 1-hr concentration (ppm)	0.067	0.066	0.052
No. days exceeded:	State: > 0.25 ppm/1-hr	0	0	0
	Annual average concentration (ppm)	0.016	0.013	ND
Exceeded:	Federal: > 0.053 ppm annual avg.	No	No	ND
Sulfur Dioxide (from the Riverside-Rubidoux station)				
	Maximum 24-hr concentration (ppm)	0.012	0.015	0.011
No. days exceeded:	State: > 0.04 ppm/24-hr	0	0	0
	Federal: > 0.14 ppm/24-hr	0	0	0
	Annual average concentration (ppm)	0.002	0.003	0.004
Exceeded:	Federal: > 0.030 ppm annual avg.	No	No	No

Source: EPA and ARB 2003–2005

² ND-No Data. There was insufficient data available to determine the value

4.4.3 REGULATORY SETTING

4.4.3.1 Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the U.S. Environmental Protection Agency (U.S. EPA) established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed “criteria” pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

The NAAQS are two-tiered: 1) to protect public health and 2) to prevent degradation of the environment (e.g., impairment of visibility, damage to vegetation and property). The six criteria pollutants are ozone (O₃), carbon monoxide (CO), particulates less than 10 microns (PM₁₀), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). In July 1997, the U.S. EPA adopted new standards for eight-hour ozone and particulates less than 2.5 microns in diameter (PM_{2.5}).

Data collected at permanent monitoring stations are used by the U.S. EPA to classify regions as “attainment” or “nonattainment,” depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the U.S. EPA.

The U.S. EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Coachella Valley area of the SSAB. The Coachella Valley Association of Governments (CVAG) is one of the 14 subregional members of SCAG. SCAG provides direction and guidance to CVAG through its governing boards by planning for future growth in the areas of transportation, housing, air quality, and other environmental issues. The CVAG Governmental and Special Projects staff represents CVAG as the Subregional Coordinator for SCAG policy and committee meetings and manages SCAG-funded studies reflecting growth visioning and transportation issues specific to the Coachella Valley and Blythe jurisdictions.

The U.S. EPA established new national air quality standards for ground-level ozone and fine particulate matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for ozone and particulate matter, was unconstitutional as an improper delegation of legislative authority to the U.S. EPA. On February 27, 2001, the U.S. Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the U.S. EPA must consider financial cost as well as health benefits in writing standards. The justices also rejected arguments that the U.S. EPA took too much lawmaking power from Congress when it set tougher standards for ozone and soot in 1997. Nevertheless, the court threw out the U.S. EPA’s policy for implementing new ozone rules, saying that the agency ignored a section of the law that restricts its decision making authority.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the eight-hour ground-level O₃ standard. The EPA issued the proposed rule implementing the eight-hour O₃ standard in April 2003. The EPA completed final eight-hour nonattainment status on April 15, 2004. On June 15, 2005, the EPA revoked the one-hour O₃ standard.

The EPA issued the final PM_{2.5} implementation rule in fall 2004. The EPA issued final designations on December 14, 2004.

4.4.3.2 State Regulations/Standards

The State of California began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are also listed in Table A.

Originally, there were no attainment deadlines for the CAAQS. However, the California Clean Air Act (CCAA) of 1988 provided a time frame and a planning structure to promote their attainment. The CCAA required nonattainment areas in the State to prepare attainment plans and proposed to classify each such area on the basis of the submitted plan, as follows: moderate, if CAAQS attainment could not occur before December 31, 1994; serious, if CAAQS attainment could not occur before December 31, 1997; and severe, if CAAQS attainment could not be conclusively demonstrated at all.

The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented. The Basin is currently classified as a nonattainment area for three criteria pollutants.

4.4.4 REGIONAL AIR QUALITY PLANNING FRAMEWORK

The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. The Federal Clean Air Act Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

The ARB coordinates and oversees both State and federal air pollution control programs in California. ARB oversees activities of local air quality management agencies and is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for federal EPA approval. The ARB maintains air quality monitoring stations throughout the State in conjunction with local air districts. Data collected at these stations are used by ARB to classify air basins as “attainment” or “nonattainment” with respect to each pollutant and to monitor progress in attaining air quality standards. ARB has divided the State into 15 air basins. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans. The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and to regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this will be the motor vehicles at an intersection, a mall, and on highways. As a State agency, the ARB regulates motor vehicles and fuels for their emissions.

4.4.4.1 Regional Air Quality Management Plan

SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. Every three years, SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. SCAQMD adopted the 2003 AQMP in August 2003 and forwarded it to ARB for review and approval. ARB approved a modified version of the 2003 AQMP and forwarded it to the EPA in October 2003 for review and approval.

The 2003 AQMP updates the attainment demonstration for the federal standards for O₃ and PM₁₀; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO₂ standard that the Basin has met since 1992.

The 2003 AQMP proposes policies and measures to achieve federal and State standards for healthful air quality in the Basin and those portions of the SSAB (formerly named the Southeast Desert Air Basin) that are under District jurisdiction (i.e., Coachella Valley). The Coachella Valley PM₁₀ Plan was revised in June 2002 and forwarded to ARB and U.S. EPA for approval. U.S. EPA approved the 2002 CVSIP on April 18, 2003.

This revision to the AQMP also addresses several State and federal planning requirements and incorporates significant, new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air-quality modeling tools. This AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the Basin for the attainment of the federal ozone air-quality standard. However, this revision points to the urgent need for additional emissions reductions (beyond those incorporated in the 1997/1999 Plan) to offset increased emissions estimates from mobile sources and meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA.

Municipalities in the Coachella Valley and SCAQMD have a demonstrated history of adopting and implementing PM₁₀ dust controls (e.g., 1990 Coachella Valley PM₁₀ State Implementation Plan [CVSIP], 1994 Best Available Control Measures [BACM] SIP, SCAQMD Rules 403 and 403.1, local dust-control ordinances, clean streets management program) to ensure healthful air for local residents and tourists. These efforts are summarized in the 1996 Coachella Valley PM₁₀ Redesignation Request and Maintenance Plan (1996 CV Plan). EPA approved the Coachella Valley's local dust-control ordinances and SCAQMD's fugitive-dust rules, effective January 8, 1999. The attainment date for serious nonattainment areas to achieve the PM₁₀ NAAQS was 2001. After years of demonstrating attainment of the PM₁₀ standards, PM₁₀ levels in 1999–2001 did not demonstrate attainment of the annual average PM₁₀ NAAQS. For reference, Coachella Valley has attained the 24-hour PM₁₀ standard since 1993. The CVSIP was revised in June 2002 and forwarded to ARB and U.S. EPA for approval. U.S. EPA approved the 2002 CVSIP on April 18, 2003. At the time of adoption, the AQMD committed to revising the 2002 CVSIP with the latest approved mobile-source emissions estimates, planning assumptions, and fugitive-dust source emissions estimates when they became available. The 2003 CVSIP updates those elements of the 2002 CVSIP; the control strategies and control measure commitments have not been revised and remain the same as in the 2002 CVSIP. The 2003 CVSIP contains updated emissions inventories, emissions budgets, and attainment modeling. It requests that U.S. EPA replace the approved transportation conformity budgets in the 2002 CVSIP

with those in the 2003 CVSIP. U.S. EPA approved these budgets on March 25, 2004, with an effective date of April 9, 2004.

4.4.5 Thresholds of Significance

Appendix G of the *CEQA Guidelines* assesses potential significance of project-related air quality impacts according to the significance criteria established by the applicable air quality management or air pollution control district, where available, in terms of whether the project will do any of the following:

- a) *Conflict with or obstruct implementation of the applicable air quality plan*
- b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation*
- c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for O₃ precursors)*
- d) *Expose sensitive receptors to substantial pollutant concentrations*
- e) *Create objectionable odors affecting a substantial number of people*

Air pollutant emissions associated with the project (e.g., fugitive dust from site preparation and grading and emissions from equipment exhaust) will occur over the short term from construction activities. There will be long-term regional emissions associated with project-related vehicle trips. Long-term local CO emissions at intersections in the project vicinity will be affected by project-related traffic. Long-term stationary source emissions will occur due to energy consumption such as electricity usage by the proposed land uses.

A project will normally be considered to have a significant effect on air quality if the project will violate any ambient air quality standards, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, as listed in Table 4.4-B, above, there are daily and quarterly emissions thresholds for construction and operation of a proposed project in the Coachella Valley area. The Coachella Valley area of the SSAB is administered by the SCAQMD, and guidelines and emissions thresholds previously established by the SCAQMD in its *CEQA Air Quality Handbook* (SCAQMD, April 1993) for SEDAB area are used in this analysis.

It should be noted that the emissions thresholds were established based on the attainment status of the SSAB in regard to air quality standards for specific criteria pollutants. The concentration standards were set at a level that protects public health with adequate margin of safety (EPA); therefore, these emissions thresholds are regarded as conservative and will overstate an individual project's contribution to health risks.

4.4.5.1 Thresholds for Construction Emissions

The following CEQA significance thresholds for construction emissions have been established for the Coachella Valley area:

- 75 pounds per day of ROC
- 100 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of PM₁₀
- 150 pounds per day of sulfur oxides (SO_x)

Projects in the Coachella Valley area whose construction-related emissions exceed any of the emission thresholds should be considered significant.

4.4.5.2 Thresholds for Operational Emissions

The daily operational emissions significance thresholds for the Coachella Valley area are as follows:

Emissions Thresholds for Pollutants with Regional Effects.

- 75 pounds per day of ROC
- 100 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of PM₁₀
- 150 pounds per day of SO_x

Projects with operation-related emissions exceeding any of the above listed emission thresholds are considered significant

Criteria Pollutant Concentration Standards.

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 part per million (ppm) or more or eight-hour CO concentrations by 0.45 ppm or more. There are no local emissions concentration standards for other criteria pollutants.

4.4.6 SHORT-TERM IMPACTS

4.4.6.1 Construction Impacts

Air quality impacts will occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during demolition, grading, and site preparation include: (1) exhaust emissions from construction vehicles; (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces; and (3) soil disturbances from grading and backfilling. The following summarizes construction emissions and associated impacts for the project site.

Construction Equipment Emissions. Grading and construction activities will cause combustion emissions from utility engines, heavy-duty construction vehicles, haul trucks, and vehicles transporting the construction crew. Exhaust emissions during grading and other construction activities envisioned on site vary daily as construction activity levels change. Peak grading days typically generate a larger amount of air pollutants than during other project construction days.

Based on the construction information provided for the project, it is anticipated that grading will take approximately eight months, of which a total of approximately 200 acres of the site will undergo grading. The project construction will be divided into three phases. Phase 1 of project construction will occur from 2006 to 2007, Phase 2 will occur from 2007 to 2008, and Phase 3 will occur from 2008 to 2009. The peak construction equipment emissions will be generated during the grading of Phase 1 when approximately 100 acres will be graded. Construction emission estimates, summarized in Table 4.4-E in terms of a probable set of equipment, are based on the construction operation estimates for similar projects. Presumably, on a peak construction day, a total of 40 workers will work on the project site with an average commute length of 50 miles round-trip for every worker. Table E shows that construction equipment/vehicle emissions generated during peak grading will exceed the SCAQMD's daily emissions threshold for NO_x.

Table 4.4-E: Peak Construction Day Emissions

	No. of Hours in Operation	Pollutants (lbs/day)				
		CO	ROC	NO _x	SO _x	PM ₁₀
Grading						
3 Scrapers	8	24.0	6.0	76.9	11.9	3.2
2 Dozers	8	19.3	3.7	48.6	7.2	2.0
1 Tracked loader	8	3.5	1.0	10.0	1.8	0.6
1 Motor grader	8	4.5	1.2	13.0	2.2	0.7
2 Excavators	8	7.7	1.9	20.8	3.9	1.1
1 Water truck	10 miles	0.4	0.0	0.2	0.0	0.0
Haul trucks ³	30 miles	17.1	1.8	28.0	0.3	0.8
40 Construction worker trips	50 miles	17.6	0.6	2.4	0.0	0.1
Total		94.2	16.2	199.9	27.4	8.4
SCAQMD Threshold		550	75	100	150	150
Exceeds SCAQMD?		No	No	Yes	No	No

Source: LSA Associates, Inc., March 2006.

Fugitive Dust. Fugitive dust emissions are generally associated with demolition, land clearing, exposure, and cut and fill operations. Dust generated daily during construction will vary substantially, depending on the level of activity, the specific operations, and weather conditions. Nearby sensitive receptors and on-site workers may be exposed to blowing dust, depending upon prevailing wind conditions. Fugitive dust will also be generated as construction equipment or trucks travel on unpaved roads on the construction site.

PM₁₀ emissions from grading operations during a peak construction day are based on assumptions and past experience on similar-sized projects. The SCAQMD estimates that each acre of graded surface creates about 26.4 pounds of PM₁₀ per workday during the construction phase of the project and 21.8 pounds of PM₁₀ per hour from dirt/debris pushing per dozer. The entire project site is not expected to be disturbed at any one time. It is assumed that up to ten acres of land will be under construction or exposed on any one day. It is also assumed that two dozers will be used eight hours per day, together with other equipment. Therefore, a maximum of 613 pounds of PM₁₀ per day will potentially be generated from soil disturbance during the grading phase.

Based on construction information from similar projects, fugitive dust emissions will be generated by scraper loading, ripping operation by dozer prior to scraper loading material, scrapers traveling on haul roads, dumping of material, road and other maintenance using a grader, redistribution of material with a dozer/compactor, wind erosion of disturbed areas, and vehicle travel on unpaved roads. With the implementation of standard conditions, such as frequent watering (e.g., minimum three times per day), fugitive dust emissions from construction activities are expected to be reduced by 50 percent.

³ Assuming 30 haul truck trips.

Table 4.4-F lists total construction emissions (fugitive dust emissions and construction equipment exhausts) during grading periods. Table 4.4-F shows that during peak grading days, daily total construction emissions with or without mitigation measures will exceed the SCAQMD threshold for NO_x and PM₁₀. The other three air pollutant emissions will be below the daily thresholds established by the SCAQMD without mitigation.

Table 4.4-F: Peak Grading Day—Total Emissions (lbs/day)

Category	CO	ROC	NO _x	SO _x	PM ₁₀
Vehicle/equipment exhaust (Table D)	94.2	16.2	199.9	27.4	8.4
Fugitive dust from 10 acres soil disturbance: no mitigation	—	—	—	—	612.8
Fugitive dust from 10 acres soil disturbance: with mitigation	—	—	—	—	306.4
Total grading: no mitigation	94.2	16.2	199.9	27.4	620.2
Total grading: with mitigation	94.2	16.2	199.9	27.4	314.8
SCAQMD Threshold	550	75	100	150	150
Exceeds SCAQMD Threshold?	No	No	Yes	No	Yes

Source: LSA Associates, Inc., March 2006

Architectural Coatings. Architectural coatings contain VOCs that are similar to ROC and are part of the O₃ precursors. At this stage of project planning, no detailed architectural coatings information is available. Compliance with the SCAQMD Rule 1113 on the use of architectural coatings should be considered sufficient. An estimate using basic site plan information shows total retail/commercial floor area of 121,500 square feet (sf) and a total of 1,338 residential units (600 visitor serving and 738 standard residential). The SCAQMD *CEQA Handbook* Table A9-13-C specifies that for nonresidential buildings, the floor area should be multiplied by 2.0 and the total residential floor area multiplied by 2.7 to obtain the total area to cover. This analysis assumes an average of 1,500 sf of floor space per residential unit, resulting in 5,661,900 sf to cover. Using the SCAQMD CEQA VOC emission factor for architectural coatings of 100 grams/liter and assuming a 1/1000th (0.001) of an inch (mil) or approximately 0.0254-millimeter-thick coat predicts a total project emission of 47,050 lbs of VOC. However, the application of architectural coating will be spread out over three phases of construction spread out over several years. Assuming a six-month period of coating application and 22 work days per month, results is approximately 356 lbs of VOC emitted per day from the application of architectural coatings. These emissions will occur after grading activities near the end of each construction phase. Short-term impacts to air quality from architectural coating application will exceed the SCAQMD emissions threshold without mitigation.

Emissions associated with architectural coatings could be reduced by using pre-coated/natural-colored building materials, water-based or low-VOC coating, and coating transfer or spray equipment with high transfer efficiency. For example, a high-volume, low-pressure (HVLP) spray method is a coating application system operated at air pressure between 0.1 and 10 pounds per square inch gauge (psig), with 65 percent transfer efficiency. Manual applications such as paintbrush, hand roller, trowel, spatula, dauber, rag, or sponge have 100 percent transfer efficiency.

The use of a HVLP spray method will increase the transfer efficiency from 25% to 65%. This increase in efficiency will reduce the VOC emissions to 137 pounds per day. The use of manual application methods will reduce the emissions further. However, the exhaust emissions generated by the on-site construction equipment likely will overlap with the architectural emissions. Therefore, the

architectural emissions likely will result in exceedances of the SCAQMD threshold, with or without mitigation measures.

Naturally Occurring Asbestos. The project is located in Riverside County, which is not among the California counties listed as containing serpentine and ultramafic rock. Therefore, NOA impact during project construction will be minimal to none.

Construction Health Risk Impacts

The only toxic air pollution emissions in any significant quantity associated with the construction of the proposed project occur from large, heavy-duty, diesel-powered equipment exhaust. While there will be other toxic substances in use on site, compliance with State and federal handling regulations control emissions to below a level of significance. The Office of Environmental Health Hazard Assessment (OEHHA) describes the health risk from diesel exhaust entirely in terms of the amount of particulate, or PM₁₀, that is emitted; currently, that health risk is described as having carcinogenic and chronic effects, but no short-term acute effect is recognized.

The construction period of the project lasts only a short time relative to the length of time required for carcinogenic and chronic health impacts. Even on the most intense day, construction activity is expected to emit less than 10 lbs of diesel exhaust particulate. Comparing this level of construction equipment usage with similar-sized projects for which LSA has conducted screening health risk analyses, potential impacts from air toxins associated with diesel trucks during project construction will be less than significant.

4.4.7 LONG-TERM IMPACTS

4.4.7.1 Long-Term Regional Air Quality Impacts

Long-term air emission impacts are those associated with stationary sources and mobile sources related to any change related to the proposed project. As shown in Table 4.4-B, long-term exposure to elevated levels of criteria pollutants could result in potential health effects. However, as stated in the Thresholds of Significance, emissions thresholds established by the air district are used to manage total regional emissions based on the air basin attainment status for criteria pollutants. These emissions thresholds were established for individual projects that will contribute to regional emissions and pollutant concentrations that may affect or delay the projected attainment target year for certain criteria pollutants. Due to the conservative nature of the thresholds and the basin-wide context of an individual project's emissions, there is no direct correlation of a single project to localized health effects.

The proposed project will result in both stationary and mobile emission sources. The stationary source emissions from the proposed uses will come from the consumption of natural gas, landscape fuel consumption, and consumer products. Based on the project *Traffic Impact Study* (LSA Associates, Inc., February 2006), implementation of the proposed project will generate 10,664 daily trips. This air quality analysis evaluates the buildout year (2009) as a worst-case scenario. Long-term operational emissions associated with the proposed project and the impacts of the project, calculated with the URBEMIS 2002 model, appear in Table 4.4-G. Project-related mobile sources will exceed daily emissions thresholds established in the SCAQMD *CEQA Air Quality Handbook* for CO, ROG, and

NO_x. However, SO₂ and PM₁₀ emissions will not exceed SCAQMD thresholds. No feasible mitigation measures can reduce the operational emissions. Therefore, the project-related long-term air quality impacts will be significant.

Table 4.4-G: Project Operational Emissions

Category	CO	ROC	NO_x	SO_x	PM₁₀
Stationary sources: summer	24.09	65.65	13.00	0.20	0.10
Vehicular traffic: summer	1,268.17	108.68	118.74	0.89	134.51
<i>Subtotal summer</i>	1,292.26	174.33	131.74	1.09	134.61
Stationary sources: winter	5.98	62.88	12.90	0.0	0.02
Vehicular traffic: winter	1,218.70	100.59	171.58	0.72	134.51
<i>Subtotal winter</i>	1,224.68	163.47	184.48	0.72	134.53
SCAQMD threshold	550	75	100	150	150
Exceeds threshold?	Yes	Yes	Yes	No	No
Significant impact?	Yes	Yes	Yes	No	No

Source: LSA Associates, Inc., February 2006

Based on the above discussion, the potential for an individual project to deteriorate regional air quality significantly, or to contribute to significant health risk is small even if the emissions thresholds are exceeded by the project. Due to the overall improvement trend in air quality in the local air basin, the regional air quality or health risk is unlikely to worsen due to emissions from an individual project.

4.4.7.2 Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project will contribute to the congestion at intersections and along roadway segments in the project vicinity. Localized air quality effects will occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, school children, the elderly, hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service, or with extremely high traffic volumes. In areas with high ambient background CO concentration, modeling is recommended to determine a project's effect on local CO levels.

In order to assess project-related impacts on localized ambient air quality, future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available.

Ambient CO levels monitored at the Palm Springs station, the closest station with monitored CO data, showed a highest recorded one-hour concentration of 3.3 ppm (State standard is 20 ppm) and a highest eight-hour concentration of 1.3 ppm (State standard is 9 ppm) during the past three years (see Table 4.4-D).

The highest CO concentrations will occur during peak traffic hours, so CO impacts calculated under peak traffic conditions represent a worst-case analysis. The project *Traffic Impact Study* (LSA Associates, Inc., February 2006) used the ARB-approved CALIN34 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections, to identify localized concentrations of CO, often termed “hot spots.” The analysis was performed for the worst-case wind-angle and wind-speed conditions and is based upon the following assumptions:

- Selected modeling locations represent the intersections closest to the project site, with the highest project-related vehicle turning movements and the worst level of service deterioration.
- Twenty receptor locations with the possibility of extended outdoor exposure from 10 to 14 meters (approximately 32 to 46 feet) of the roadway centerline near intersections were modeled to determine CO concentrations.
- The calculations assume a meteorological condition of almost no wind (0.5 meter/second), a suburban topographical condition between the source and receptor, and a mixing height of 1,000 meters, representing a worst-case scenario for CO concentrations.
- CO concentrations are calculated for the one-hour averaging period, then compared to the one-hour standards. In accordance with techniques outlined in the SCAQMD *CEQA Air Quality Handbook* (October 1993), CO eight-hour averages are extrapolated and compared to the eight-hour standards; a persistence factor of 0.7 is used to predict the eight-hour concentration.
- Concentrations are given in ppm at each of the receptor locations.
- The “at-grade” link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used rather than the “intersection” link selection in the CALINE4 model. The Department has suggested that the “intersection” link should not be used due to an inappropriate algorithm based on outdated vehicle distribution). Emissions factors from the EMFAC2002 model for all vehicles were used for the vehicle fleet.
- The highest level of the second-highest one-hour and eight-hour CO concentrations monitored at the Palm Springs station in the past three years were used as background concentration: 3.1 ppm for the one-hour CO and 1.1 ppm for the eight-hour CO. The “background” concentrations are then added to the model results for future with and without the proposed project conditions.

Table 4.4-H, below, lists the CO concentrations for six intersections in the project vicinity under the existing (2006) conditions. Table 4.4-I lists the 2007 CO concentrations, and Table 4.4 J lists the 2009 CO concentrations. The intersections examined for air quality were those with the lowest LOS as noted in the Traffic Study. Please note that, due to technology improvements, emission factors (for vehicle exhaust) for future years will decrease. And background concentrations are anticipated to continue to decrease as concerted efforts to improve regional air quality progress. Therefore, in future, CO concentrations in the future years will generally be lower than existing conditions.

As shown in Tables 4.4-H, 4.4-I, and 4.4-J, none of the six intersections analyzed will have a one-hour CO concentration exceeding State standards of 20 ppm under the 2010 non-cumulative and

cumulative conditions. The 8-hour CO concentration at these intersections will also be below the State standard of 9.0 ppm.

The project-related increase in CO concentrations at all five intersections will be 0.8 ppm for the one-hour and 0.6 ppm for the eight-hour period. Since no federal or State standards will be exceeded, no CO hot spots will occur. Therefore, no air pollution control measures are necessary or recommended for CO emissions.

4.4.7.3 Air Quality Consistency Analysis

By linking local planning and unique individual projects to the air quality plans, a consistency determination plays an essential role in local agency project review. It fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. The Air Quality Analysis performed for this project identified measures that mitigate air quality impacts to a level similar to the impacts anticipated for development that would be compliant with existing general plan and zoning ordinance regulations.

Table 4.4-H: Existing CO Concentrations⁴

Intersection	Receptor Distance to Road Centerline (Meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards? ⁵	
				1-Hr	8-Hr
Palm Drive and Camino Campanero	14	5.5	2.8	No	No
	14	5.4	2.7	No	No
	14	5.3	2.6	No	No
	14	5.2	2.6	No	No
Palm Drive and Dillon Road	14	5.5	2.8	No	No
	10	5.4	2.7	No	No
	10	5.3	2.6	No	No
	10	5.3	2.6	No	No
Palm Drive and 20th Avenue	14	5.5	2.8	No	No
	14	5.5	2.8	No	No
	14	5.4	2.7	No	No
	14	5.0	2.4	No	No
Palm Drive and Varner Road	14	5.3	2.6	No	No
	14	5.2	2.6	No	No
	14	5.2	2.6	No	No
	14	4.8	2.3	No	No
Palm Drive and Camino Campanero	14	5.2	2.6	No	No
	14	5.1	2.5	No	No
	14	5.1	2.5	No	No
	14	4.8	2.3	No	No
Palm Drive and Dillon Road	14	5.5	2.8	No	No
	14	5.4	2.7	No	No
	14	5.3	2.6	No	No
	14	5.2	2.6	No	No

Source: LSA Associates, Inc., February 2006.

⁴ Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 1.1 ppm; measured at the Fs-590 Racquet Club Avenue, Palm Springs, CA, AQ Station (Riverside County).

⁵ The 1-hour CO State standard is 20 ppm, and the 8-hour CO standard is 9 ppm.

Table 4.4-I: 2007 CO Concentrations⁶

Intersection	Receptor Distance to Road Centerline (Meters)	Project-Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards? ⁷	
					1-Hr	8-Hr
Palm Drive and Camino Campanero	14	0.5 / 0.4	5.1 / 5.6	2.5 / 2.9	No	No
	14	0.4 / 0.3	5.1 / 5.5	2.5 / 2.8	No	No
	14	0.2 / 0.2	5.0 / 5.2	2.4 / 2.6	No	No
	14	0.3 / 0.2	4.9 / 5.2	2.4 / 2.6	No	No
Palm Drive and Dillon Road	14	0.7 / 0.5	5.2 / 5.9	2.6 / 3.1	No	No
	10	0.7 / 0.5	5.1 / 5.8	2.5 / 3.0	No	No
	10	0.7 / 0.5	5.0 / 5.7	2.4 / 2.9	No	No
	10	0.3 / 0.2	5.0 / 5.3	2.4 / 2.6	No	No
Palm Drive and 20th Avenue	14	0.8 / 0.5	5.2 / 6.0	2.6 / 3.1	No	No
	14	0.8 / 0.5	5.2 / 6.0	2.6 / 3.1	No	No
	14	0.8 / 0.6	5.1 / 5.9	2.5 / 3.1	No	No
	14	0.8 / 0.6	4.8 / 5.6	2.3 / 2.9	No	No
Palm Drive and Varner Road	14	0.8 / 0.6	5.0 / 5.8	2.4 / 3.0	No	No
	14	0.8 / 0.5	4.9 / 5.7	2.4 / 2.9	No	No
	14	0.7 / 0.5	4.9 / 5.6	2.4 / 2.9	No	No
	14	0.5 / 0.3	4.6 / 5.1	2.2 / 2.5	No	No
Palm Drive and Camino Campanero	14	0.9 / 0.6	4.9 / 5.8	2.4 / 3.0	No	No
	14	0.7 / 0.5	4.9 / 5.6	2.4 / 2.9	No	No
	14	0.8 / 0.6	4.8 / 5.6	2.3 / 2.9	No	No
	14	0.5 / 0.3	4.6 / 5.1	2.2 / 2.5	No	No
Palm Drive and Dillon Road	14	0.5 / 0.4	5.1 / 5.6	2.5 / 2.9	No	No
	14	0.4 / 0.3	5.1 / 5.5	2.5 / 2.8	No	No
	14	0.2 / 0.2	5.0 / 5.2	2.4 / 2.6	No	No
	14	0.3 / 0.2	4.9 / 5.2	2.4 / 2.6	No	No

Source: LSA Associates, Inc., February 2006.

⁶ Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 1.1 ppm; measured at the Fs-590 Racquet Club Avenue, Palm Springs, CA, AQ Station (Riverside County).

⁷ The one-hour CO State standard is 20 ppm, and the eight-hour CO standard is 9 ppm.

Table 4.4-J: 2009 CO Concentrations⁸

Intersection	Receptor Distance to Road Centerline (Meters)	Project-Related Increase 1-hr/8-hr (ppm)	Without/With Project 1-Hour CO Concentration (ppm)	Without/With Project 8-Hour CO Concentration (ppm)	Exceeds State Standards? ⁹	
					1-Hr	8-Hr
Palm Drive and Camino Campanero	14	0.6 / 0.4	4.9 / 5.5	2.4 / 2.8	No	No
	14	0.4 / 0.2	4.9 / 5.3	2.4 / 2.6	No	No
	14	0.3 / 0.2	4.8 / 5.1	2.3 / 2.5	No	No
	14	0.4 / 0.3	4.7 / 5.1	2.2 / 2.5	No	No
Palm Drive and Dillon Road	14	0.7 / 0.5	5.0 / 5.7	2.4 / 2.9	No	No
	10	0.5 / 0.4	5.0 / 5.5	2.4 / 2.8	No	No
	10	0.5 / 0.3	4.9 / 5.4	2.4 / 2.7	No	No
	10	0.3 / 0.2	4.8 / 5.1	2.3 / 2.5	No	No
Palm Drive and 20th Avenue	14	0.8 / 0.5	4.9 / 5.7	2.4 / 2.9	No	No
	14	0.8 / 0.5	4.9 / 5.7	2.4 / 2.9	No	No
	14	0.7 / 0.5	4.9 / 5.6	2.4 / 2.9	No	No
	14	0.7 / 0.4	4.6 / 5.3	2.2 / 2.6	No	No
Palm Drive and Varner Road	14	0.7 / 0.5	4.9 / 5.6	2.4 / 2.9	No	No
	14	0.7 / 0.5	4.8 / 5.5	2.3 / 2.8	No	No
	14	0.6 / 0.4	4.8 / 5.4	2.3 / 2.7	No	No
	14	0.7 / 0.5	4.4 / 5.1	2.0 / 2.5	No	No
Palm Drive and Camino Campanero	14	0.8 / 0.6	4.7 / 5.5	2.2 / 2.8	No	No
	14	0.8 / 0.5	4.6 / 5.4	2.2 / 2.7	No	No
	14	0.7 / 0.4	4.6 / 5.3	2.2 / 2.6	No	No
	14	0.7 / 0.5	4.4 / 5.1	2.0 / 2.5	No	No
Palm Drive and Dillon Road	14	0.6 / 0.4	4.9 / 5.5	2.4 / 2.8	No	No
	14	0.4 / 0.2	4.9 / 5.3	2.4 / 2.6	No	No
	14	0.3 / 0.2	4.8 / 5.1	2.3 / 2.5	No	No
	14	0.4 / 0.3	4.7 / 5.1	2.2 / 2.5	No	No

Source: LSA Associates, Inc., February 2006.

4.4.8 Project Impacts

4.4.8.1 Construction Impacts.

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available measures so that such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the

⁸ Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 1.1 ppm; measured at the Fs-590 Racquet Club Avenue, Palm Springs, CA, AQ Station (Riverside County).

⁹ The one-hour CO State standard is 20 ppm, and the eight-hour CO standard is 9 ppm.

fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules will reduce impacts on nearby sensitive receptors.

The following are the applicable Rule 403 Measures:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. Locations where grading is to occur will be thoroughly watered prior to earthmoving.
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Pave construction access roads at least 100 feet onto the site from main road.
- Traffic speeds on all unpaved roads will be reduced to 15 mph or less.

4.4.8.2 Operations Impacts

The project is expected to create total (vehicular and stationary) daily emissions exceeding the daily emissions thresholds established by the SCAQMD. The stationary source emissions from the proposed uses would come from consumption of natural gas, landscape fuel consumption, and consumer products. Vehicular sources would come from the estimated 10,664 daily trips, based on the Traffic Impact Study, which could exceed the daily emissions thresholds established in the SCAQMD CEQA Air Quality Handbook for CO, ROG, and NO_x.

Secondary Effects Evaluation. The potential impact of the proposed Two Bunch Palms SP project on sensitive receptors was evaluated. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors.

The only sensitive receptors in the vicinity of the project site are single-family residences. The nearest school is 1/3 mile away. The only potential sensitive receptors on the project site are the proposed residential uses and the wellness center. These sensitive receptors are not within one-quarter mile of any facilities emitting toxic pollutants, nor are the sensitive receptor uses proposed to be located adjacent to a congested roadway or other area with a high background CO concentration. The proposed residential uses are not downwind from any known emitter of objectionable odors. Therefore, the proposed Two Bunch Palms SP project is not anticipated to result in adverse air quality impacts on sensitive receptors and the proposed residential and wellness center uses on the project site are not anticipated to be adversely impacted by air quality emissions.

The potential for the proposed Two Bunch Palms SP project to generate objectionable odors was evaluated. Land uses generally associated with odor complaints typically include agricultural uses (livestock and farming); wastewater treatment plants; food processing plants; chemical plants; composting operations; refineries; landfills; dairies; and fiberglass molding facilities. The Two Bunch Palms SP project does not include any land uses that are expected to generate objectionable odors, nor does the proposed project include any of the land uses typically associated with odor complaints.

Therefore, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to objectionable odors.

Cumulative Impacts

4.4.9 Summary of Impacts

The proposed Two Bunch Palms SP project may result in potentially significant adverse air quality impacts related to:

IMPACT AQ -1 Short term adverse PM₁₀ and NO_x emissions during construction.

IMPACT AQ -2 Long term adverse impacts related to ROC, NO_x and CO emissions during operations as a result of cumulative effects.

4.4.10 Mitigation Measures

Construction. The potential short-term adverse project air quality impacts related to grading can be substantially reduced, to below a level of significance by properly maintaining grading equipment, applying soil stabilizers to inactive areas, replacing groundcover in disturbed areas quickly, watering areas being graded twice per day, watering all (unpaved) haul roads twice per day, and using cooled exhaust gas recirculation on both on-road and off-road construction vehicles/equipment. Implementation of the following mitigation measures will reduce the potentially significant adverse air quality grading and construction impacts to below a level of significance.

MM AQ-1 Prior to the approval of a grading plan for the project, the City of Desert Hot Springs Director of Planning will condition the grading plan to require the contractor to implement the following:

- Performing regularly scheduled equipment maintenance to minimize equipment emissions.
- Use of cooled exhaust gas recirculation (EGR) on both on-and off-road vehicles and equipment.
- Use of alternative fuels such as ultra-low sulfur diesel fuels for off-road construction vehicles and equipment where possible.
- Revegetate disturbed areas as quickly as possible.
- All excavating and grading operations shall be suspended when wind speeds exceed 25 mph.
- All streets shall be swept once per day if visible soil materials are carried to adjacent streets.
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.
- All on-site roads shall be paved as soon as feasible, watered periodically, or chemically stabilized

- The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.
- The Construction Contractor shall select the construction equipment used on site based on low-emission factors and high energy efficiency
- The Construction Contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through-traffic lanes adjacent to the site.
- The Construction Contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment when not in use.
- Adhere to SCAQMD Rule 403 and 402 measures.
- The Construction Contractor shall implement a ride sharing plan for the construction crew.
- Following a phased approach to the application of architectural coatings to limit the amount of architectural coating off-gas by limiting application of architectural coatings to 225 gallons per week or less and the use of an asphalt sealer to reduce off-gassing and odors associated with new asphalt.
- No more than 100 acres shall be graded at any given time.

Operations. Most of the emissions from the proposed Two Bunch Palms SP project will result from vehicular trips by residents, employees and visitors. Such emissions are regulated by regional authorities rather than by the City of Desert Hot Springs, but several actions and project features are recommended to reduce air quality operational impacts. These include measures to facilitate the use of electric maintenance equipment and low emission centralized water heaters, and to prohibit wood-burning fireplaces.

MM AQ-2 Prior to the issuance of a building permit, the City of Desert Hot Springs Director of Planning will condition all plans to include the following:

- Electrical outlets in the fronts and backs of the residential units to facilitate the use of electric landscape equipment
- Central water heating systems
- Trees planted to provide shade and shadow to buildings
- Energy-efficient low-pressure sodium parking lot lights
- Solar or low-emission water heaters with combined space/water heater units
- Double-paned glass or window treatment for energy conservation in all exterior windows
- Any interior or exterior fireplaces or fire pits limited to the use of natural gas only; wood-burning fireplaces will be prohibited.

4.4.11 CEQA Level of Significance after Mitigation

Due to threshold standards, the potentially significant adverse air quality impacts of the operation of the proposed project cannot be mitigated below a level of significance. It should be noted that, due to the use of SCAQMD methodology, any project of this size will result in adverse effects during operations. If the project were divided into smaller separate projects of fewer than roughly 400 residences each, then the operational emissions of each smaller project would likely be reduced to below the SCAQMD thresholds. But the cumulative actual air quality impact would be the same even if the project were relocated elsewhere in the City or this part of the Coachella Valley. In fact, the adverse air quality impact will result from the demand for housing in the Coachella Valley and southern California, rather than from this or any other specific development. However, in the interest of disclosure, this EIR identifies the potential operations impacts of the proposed Two Bunch Palms SP project related to air quality as significant and adverse even with mitigation in the cumulative buildout scenarios presented to fulfill SCAQMD thresholds of analysis.

4.5 BIOLOGICAL RESOURCES

The analysis in this section is based on the following documents:

1. *Biological Assessment and Impact Analysis of the Proposed King Development Desert Hot Springs Site*, James W. Cornett Ecological Consultants, July 1, 2005

4.5.1 Setting

The project area lies within the geographical region known as the Colorado Desert. The area is mostly flat except for a sand mound in the northern third of the site and lower slopes of Miracle Hills located immediately east of the site. Elevation averages approximately 950 feet above sea level. Residential developments lay either adjacent to or very close to the east, west, and north boundaries of the project site. Open, creosote scrub desert lies to the south.

The Biological Assessment indicates that no officially listed plant or animal species were found during the surveys; however, two special-status species were observed on site, the burrowing owl and Coachella Valley ground squirrel. The southern portion of the project area lay within the fee area of the Coachella Valley Fringe-toed Lizard Habitat Conservation Area and the associated fee is \$600 per acre, which applied to the entire project site is a total of \$171,000. The triple-ribbed milkvetch is the only officially listed plant species found on the project site.

Recently, two small fires have burned approximately three acres in the mesquite hummock area situated in the northern one-third of the project site. Approximately 5% of the project site has been impacted by illegal dumping and 10% has been impacted by illegal off-road vehicle use that has created informal roads and trails.

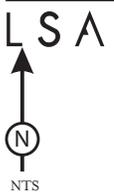
The project site is covered with the Sonoran Creosote Bush Scrub Community with the plants being the creosote bush (*Larrea tridentate*), burrobush (*Ambrosia dumosa*), encelia (*Encelia farinosa*) and indigo bush (*Psoralea schottii*). A large mesquite hummock complex covers 14 acres of the project area, the dominant plant in this habitat is the honey mesquite, see Figure 4.5-1. (*Prosopis grandulosa*).

Existing development in the area has led to the introduction of many non-native plant and animal species. Non-natives such as domestic pets and even infrastructures such as lighting have impacts on plant and animal communities beyond the boundaries of their own respective communities. For example, the biological survey conducted for the Two Bunch Palms SP area noted approximately twenty-five acres of mesquite hummock on site. However, the mesquite trees were severely degraded due to littering and the fires generated by frequent human interloping. Similarly, the SP project area could conceivably support the fringe-toed lizard if the surrounding area were pristine. However, the development surrounding the site and found throughout much of Desert Hot Springs has resulted in a drastic reduction in the blowsand corridors fringe-toed lizards require. In fact, no lizards were encountered on site during the biological surveys, but potential habitat remains at the southernmost portion of the site within the degraded blowsand corridor.

Biological surveys were conducted in May and June of 2005. Animal surveys were conducted simultaneously with plant surveys. Survey dates included favorable times of year when ephemeral plant and animal species would likely be detected. Surveys were conducted by walking north-south transects at 10-yard intervals through the project site and 100 yards beyond site boundaries.



FIGURE 4.5-1



SOURCE: EDA and Keith Hall Architects

P:\jkh530_Two Bunch Palms\Graphics\Figure 4.5-1 Mesquite Habitat.pdf

Two Bunch Palms EIR
Mesquite Habitat

4.5.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have a significant adverse effect on biological resources if it will:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the United States Fish and Wildlife Service*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the United States Fish and Wildlife Service*
- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means*
- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites*
- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan*

Project actions are also evaluated in terms of impacts to species that do not fall into one of the above categories, but which nevertheless are protected by State or federal regulations. Most often, such cases involve nests of birds such as red-tailed hawks (*Buteo jamaicensis*) that are not rare but that are protected under the Federal Migratory Bird Treaty Act and the California Fish and Game Code.

4.5.3 Impacts of Proposed Project

Flora. The proposed Two Bunch Palms SP project will result in the removal of most of the scrub habitat on the site, including the native plant and animal species that currently live there. Creosote scrub habitat is widespread in the desert regions of California; however, mesquite hummock is a specially designated habitat in the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). Per CVMSHCP standard, loss of the mesquite hummock is a potentially significant impact to the plant community. However, the project site does not lie within a designated conservation area of the CVMSHCP; therefore, a fee to contribute to an existing fund for mesquite hummock elsewhere or the acquirement of acres elsewhere will mitigate the loss at Two Bunch Palms. None of the thirteen listed "Rare and Endangered Vascular Plants of California" that could conceivably occur on the site were encountered during the biology surveys. Nevertheless, mesquite hummock is itself a rare habitat. The U.S. Fish and Wildlife Service has indicated that the mesquite

hummock at Two Bunch Palms is among the largest remaining in the Coachella Valley. Although the Biology Report indicates an estimate of 25 acres of mesquite hummock, a field survey using handheld GPS units was performed subsequent to the issuance of the NOP and determined a true acreage figure of 14.

The federally endangered triple-ribbed milk vetch has, in the past, been found in similar habitat, so the project site is considered viable for this species. No evidence of the vetch was found on the Two Bunch Palms SP project site, and the surveys were conducted in late spring 2005 when this spring-blooming plant would likely have been detected.

Native fan palm oases are extant on the project site. The oases, which are located near the existing resort development, will not be removed as a part of the development.

Fauna. No endangered/threatened species were encountered on the project site during the survey period. The absence of the Coachella Valley fringe-toed lizard and flat-tailed horned lizard, both of which are species of special concern, can be attributed to the alteration of the surrounding environment. Human settlement nearby has prevented the continuation of blowsand, a habitat component essential for the lizards, through the Two Bunch Palms site. Although no lizards were found on the project site, the area does incorporate a segment of the required mitigation fee area for the threatened Coachella Valley fringe-toed lizard. A payment of mandatory fees to the County of Riverside is required as mitigation for this species. However, the State's annual buy-in on the fee agreement per the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan expired on June 30, 2006, and was extended for one year. Beyond that time, the California Department of Fish and Game may demand negotiation on a site-by-site basis.

A burrowing owl, another species of special concern, was observed flying over the project site. However, as no burrows were discovered on the site, it is reasonable to assume that the observed owl was hunting on the site but not living there. A complete list of species encountered on the site, including the ground squirrel, is included in the Biological Resources Report attached as an appendix to this EIR. The Coachella Valley ground squirrel was encountered on the project site during the biological survey and burrows were detected over most of the project area, which is notable given the squirrel's designation as a species of special concern and a Federal Candidate for listing as a threatened or endangered species. However, the Coachella Valley ground squirrel is not currently officially listed as threatened or endangered by either the California Department of Fish and Game or the United States Fish and Wildlife Service. Furthermore, the Coachella Valley ground squirrel has considerable habitat protection in the Coachella Valley Preserve system, the Boyd Deep Canyon Reserve, and the Salton Sea Recreation Area. Nonetheless, the Coachella Valley ground squirrel is a species of special concern that the City of Desert Hot Springs has indicated will require mitigation.

Indirect Impacts

According to the Biological Assessment, the project will have indirect impacts on the surrounding native biota to the south because the site will no longer serve as a source of emigration of native plant and animal species into the surrounding lands. Increased vehicular traffic, noise levels, and light pollution will decrease the diversity and density of native plants and animals in the region immediately surrounding the project. The introduction and dispersal of exotic plant species will also

impact the native plant and animal populations. However, the project will have no significant impacts to officially listed or proposed species or unique habitats beyond the boundaries of the project site.

Non-native species introduced to the SP project site, such as domestic pets, could adversely affect off-site biological resources. The small mammal and bird populations in the less-developed area to the south of the project area could be particularly vulnerable to domestic cats. Mitigation of these impacts can be achieved through the education of pet owners with brochures and encouraging cat owners to keep their pets indoors.

Many of the areas adjacent to the project site are already developed. As such, indirect impacts to biological resources on those developed areas is negligible. Furthermore, the existing street grid precludes free movement of species between sites.

Waters of the United States and the State. There are no designated wetlands or waters on the project site. Therefore, the proposed Two Bunch Palms SP project will not result in adverse impacts on wetlands.

4.5.4 Summary of Impacts

The proposed Two Bunch Palms SP project may result in the following potentially adverse effects on biological resources:

- | | |
|---------------------|--|
| IMPACT BIO-1 | The proposed Two Bunch Palms SP project may result in adverse effects on the native plant and animal communities in the open areas to the south of the project site due to invasion of exotic species, human intrusion, domestic pets, and lighting. |
| IMPACT BIO-2 | The proposed Two Bunch Palms SP project will eliminate approximately 14 acres of mesquite hummock habitat. |
| IMPACT BIO-3 | Although no specimens were encountered on the proposed project site, its southernmost portion includes potential fringe-toed lizard habitat. |
| IMPACT BIO 4 | The Palm Springs ground squirrel, a federal candidate for listing, was encountered on the project site. |
| IMPACT BIO 5 | The proposed Two Bunch Palms SP project will increase the amount of ambient light in the project area. |

4.5.5 Mitigation Measures

The following mitigation measures will help avoid or minimize adverse impacts of the proposed Two Bunch Palms SP project on biological resources:

- MM BIO-1** Prior to approval of Certificates of Use and Occupancy (including models), the project applicant will prepare, and the Director of Planning of the City of Desert Hot Springs will review and approve, an educational brochure that describes the sensitive nature of indigenous plants, animals and ecosystems on and adjacent to the Two Bunch Palms SP project site. This brochure will be provided to all employees, residents, and visitors on the Two Bunch Palms SP project site. This brochure will be provided to all employees, residents, and visitors on the Two Bunch Palms SP project site. Prior to the approval of a Master Landscape Plan, the City Director of Planning will review the Plan to ensure that landscaped community and common areas incorporate native plant species. Prior to the submittal of any landscape plan, the project biologist will review and approve the plan.
- MM BIO-2** The project proponent shall acquire one acre to every acre of impacted mesquite hummock habitat.
- MM BIO-3** The project proponent will pay a sum of \$171,000 to the City of Desert Hot Springs as a mitigation fee for impacts to the habitat of the fringe-toed lizard. This fee was calculated by multiplying the standard mitigation fee of \$600 per acre by the total project acreage of 285.
- MM BIO-4** The project proponent will pay a sum of \$2,500 to a City-designated Conservation organization as a mitigation fee for impacts to the habitat of the ground squirrel.
- MM BIO-5** Prior to the approval of any building permits, the Director of Planning of the City of Desert Hot Springs will review building plans and a photometric study, submitted by project applicant, to ensure that outdoor project lighting is minimized consistent with public safety needs, and directed at the ground, away from adjacent native, undeveloped areas. This strategy will minimize night time glare and light sources and potential adverse impacts to nocturnal species.

4.5.6 Level of Significance after Mitigation

As required in Mitigation Measure BIO-1, educating employees, residents, and visitors about the local ecology can reduce the potential for human activities to destroy sensitive vegetation or harm wildlife species.

Native plant species in landscaping can provide habitat to local fauna and reduce the escape of exotic plant species into surrounding native areas. Mitigation Measure BIO-2 reduces the likelihood that exotic species will escape from the developed parts of the Two Bunch Palms SP project site and invade otherwise native areas, on and off the project site.

Mitigation Measure BIO-3 will reduce the potential for adverse project impacts by providing funds for the preservation of fringe-toed lizard habitat off-site.

Mitigation Measure BIO-4 will reduce the potential for adverse project impacts by providing funds for the preservation of the ground squirrel.

Mitigation measure BIO-5 will limit light and glare impacts of the proposed Two Bunch Palms SP project on nocturnal species that depend on darkness for foraging and other activities.

Implementation of the mitigation measures described above will reduce the potential direct adverse impacts of the proposed Two Bunch Palms SP project on biological resources below a level of significance.

4.6 CULTURAL RESOURCES

The analysis in this section is based in part on the following documents:

1. *Phase 1 Historical/Archaeological Resources Report*, January 2006, CRM Tech
2. *Phase 1 Paleontological Resources Report*, January 2006, CRM Tech
3. *CRM Tech memorandum*, September 13, 2006
4. *CRM Tech e-mail correspondence*, October 5, 2006

4.6.1 Setting

The Coachella Valley has been characterized as an historical center of Native American settlements within the United States. The earliest identified natives of this area are attributed to the Cahuilla peoples, who were hunters and gatherers largely working within small groups and clans. Population data is sketchy, but estimates of the 19th century populations are between 3,600 and 10,000 persons. The Cahuilla were decimated through the introduction of European contact and in particular by smallpox, to which they had no natural immunities.

Policies in the Desert Hot Springs Comprehensive General Plan and EIR Mitigation Measures require that development on sites with existing or potential cultural, historical, or paleontological resources be subject to resource surveys and site-specific mitigation prior to individual project approval. CRM TECH conducted record searches, field surveys, and monitoring of trenching from June 2005 through August 2005. Studies of the TBP site have identified a historically significant site, designated as CA-RIV-1246 (CRM Tech: January 2006), contained within the project area, and the historical survey report determined the project site to be an historical resource under CEQA's definition (§15064.5) due to the presence of qualifying artifacts within and adjacent to the site. In addition, CRM Tech found bones that appear to be of human origin on the proposed project site. (Records search also indicated the presence of two historic-period sites within a one-mile radius, but these sites are located outside the project area and do not require further consideration here.) Given the discoveries made, the reference site CA-RIV-1246 may be eligible for listing on the California Register of Historical Resources based on criterion 4: "...Has yielded, or may be likely to yield, information important in prehistory or history." CRM Tech acknowledged that it is likely that there are additional subsurface cultural resources within the project site area.

In order to refine site conditions and the limits of the sensitive sites further, CRM Tech conducted a Phase II study concurrent with the preparation of this EIR. Information from that study and subsequent data discovered will be incorporated into the mitigation monitoring program ultimately implemented with any project at Two Bunch Palms. Thus far, based on artifacts and ecofacts discovered in 2005 and continuing into 2006, evidence indicates that the site was a significant village settlement during portions of the Holocene Period. Artifacts discovered include chipped stone pieces, ceramic sherds, ground stone fragments, shell beads, and faunal remains. In addition, portions of human cremations were identified within the project area.

Paleontological Resources. Between June and August 2005, CRM TECH staff Daniel Ballester, Julie Toenjes and Nina Gallardo performed a field study survey of the project area for paleontological resources. They found little of paleontological interest in the northwestern and southern portions of

the project site; however, the northeastern portion of the project area appears to contain significant paleontological resources.

4.6.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have significant adverse effect on cultural resources if it does any of the following:

- a) *Causes a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 in the CEQA Guidelines*
- b) *Causes a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines*
- c) *Directly or indirectly destroys a unique paleontological resource or site or unique geologic feature*
- d) *Disturbs any human remains, including those interred outside of formal cemeteries*

Pursuant to Guidelines issued by the Governor's Office of Planning and Research (November, 2005), Senate Bill 18 (Chapter 905, Statutes of 2004) codified a consultation and referral procedure to insure that potentially significant Native American cultural sites are reviewed with local Native American Tribes at early stages of development consideration. These Guidelines and State planning provisions call for local agencies to notify Native American tribes of the submittal of development permit applications that involve General Plan and Specific Plan adoption and/or amendment. Timeframes for the consultation and response by tribes concerning their meet-and-confer process prior to cities' and counties' actions on projects are intended to preserve and maintain the significant heritage resources of the State of California. This input is relevant to the CEQA process although not listed as a threshold. Initial contact with local Coachella Valley Native American tribes was conducted by the City per standards set forth by the Native American Heritage Commission. This initiated a 90-day period beginning October 20, 2006, in which interested tribes could request consultation.

This consultation process led to the development of the mitigation measures presented here. The City will also provide a referral as required by the statutes 45 days prior to their consideration of certification of the Final EIR and actions on the proposed project entitlements.

4.6.3 Impacts of the Proposed Project

Historic and Archaeological Resources. Based on the studies conducted by CRM Tech, the project site was declared to contain significant cultural resources pursuant to CEQA regulations, and in the course of its studies of the proposed project site, CRM recovered a large variety of artifacts *in situ*. Based on the defined site, development of the commercial center as proposed will have a significant impact on these resources. Grading and construction activities within the designated site should include monitoring at all stages of construction activities to insure identification of any further resources discovered in the process. As an alternative to grading and building over sensitive

archaeological resources, the project could be developed in a manner that altogether avoids those resources.

As noted in the California Public Resources Code:

21083.2. (a) As part of the determination made pursuant to Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological **resources**, the environmental impact report shall address the issue of those resources. An environmental impact report, if otherwise necessary, shall not address the issue of nonunique archaeological **resources**. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued.

(b) If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these **resources** to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

- (1) Planning construction to avoid archaeological sites.
- (2) Deeding archaeological sites into permanent conservation easements.
- (3) Capping or covering archaeological sites with a layer of soil before building on the sites.
- (4) Planning parks, greenspace, or other open space to incorporate archaeological sites.

(c) To the extent that unique archaeological **resources** are not preserved in place or not left in an undisturbed state, mitigation measures shall be required as provided in this subdivision. The project applicant shall provide a guarantee to the lead agency to pay one-half the estimated cost of mitigating the significant effects of the project on unique archaeological **resources**. In determining payment, the lead agency shall give due consideration to the in-kind value of project design or expenditures that are intended to permit any or all archaeological **resources** or California Native American culturally significant sites to be preserved in place or left in an undisturbed state. When a final decision is made to carry out or approve the project, the lead agency shall, if necessary, reduce the specified mitigation measures to those which can be funded with the money guaranteed by the project applicant plus the money voluntarily guaranteed by any other person or persons for those mitigation purposes. In order to allow time for interested persons to provide the funding guarantee referred to in this subdivision, a final decision to carry out or approve a project shall not occur sooner than 60 days after completion of the recommended special environmental impact report required by this section.

(d) Excavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report.

Paleontological Resources. Due to the extensive alluvium on the project site, fossil remains are unlikely to be found over most of it as determined by the CRM Tech study. However, depending on the extent and depth of grading activity, paleontological resources could be disturbed during project development, especially in the northeastern portion of the project area where the geologic structure is most conducive to fossil discovery; the northwestern and southern sections have a low potential for paleontological resources.

Illegal fossil collection becomes more likely as the site becomes more accessible to the public, so impacts to paleontological resources as a result of the project are potentially significant.

Human Remains. Human remains were discovered on the project site during preliminary analysis. A testing and evaluation program is being implemented by CRM Tech to ascertain the significance of the discovery. The Most Likely Descendant (MLD) will be consulted for review of mitigation.

4.6.4 Summary of Impacts

The proposed Two Bunch Palms SP project may result in the following potentially adverse effects on cultural resources:

IMPACT CULT-1: Phase I and II study identified that site CA-RIV-1246 is potentially eligible for listing in the California Register of Historical Resources due to the artifacts found during the field study. Project development will have a significant impact on the known portions of the sites and could have significant impact on as yet undiscovered artifacts in or near site CA-RIV-1246, previously identified as a Native American prehistoric village.

IMPACT CULT -2: Project grading may result in the discovery of previously unknown paleontological resources. Monitoring of site during grading is recommended.

4.6.5 Mitigation Measures

The following mitigation measures have been identified.

MM-CULT 1 A data recovery program will be conducted and include the following procedures:

- Preparation of a research design, including plans for site monitoring and detailing procedures to be followed in the event of unanticipated discovery of archaeological or paleontological artifacts.
- Systematic collection of surface artifacts
- Excavation of archaeological recovery units to exhaust the data potential of the site
- Laboratory analysis of collected artifacts
- Cataloguing and preparation of all artifacts for permanent curation at an appropriate facility
- Preparation of a final report to present the findings of the data recovery program as listed above, and to interpret such findings within the context of the research design
- Upon completion and acceptance of the final Report the material shall be curated at a permanent repository so that the collection is available to Tribal members and professional archaeologists
- In the event of the discovery or recognition of any human remains in any location on the project site, the following steps will be taken:

1. All excavation and disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains will be suspended until:
 - (a) The Riverside County Coroner is contacted to determine whether investigation of the cause of death is required.
 - (b) If the Coroner determines that no investigation is required, and that the remains are Native American:
 - The Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours.
 - The NAHC will identify the person or persons it believes to be the most likely descended from the deceased Native American.
 - The most likely descendent (MLD) may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
 - Additionally, an approved Tribal Cultural Resource Monitor(s) shall be present during any survey and/or any ground disturbing activities. Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente THPO.

If human remains are encountered during project construction, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.36.

The following actions must be taken immediately upon the discovery of human remains:

- a. Stop immediately and contact the County Coroner;
- b. The Coroner has two working days to examine human remains after being notified by the responsible person. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission;
- c. The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendent of the deceased Native American;

- d. The most likely descendent has 24 hours to make recommendation to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods;
 - e. If the descendant does not make recommendations within 24 hours the owner shall re-enter the remains in an area of the property secure from further disturbance, or if the owner does not accept the descendant's recommendation, the owner of the descendant may request mediation by the Native American Heritage Commission.
2. Where the following conditions occur, the developer(s) or its/their authorized representative will rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:
 - (a) The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 24 hours after being notified by the NAHC.
 - (b) The MLD identified fails to make a recommendation; or
 - (c) The landowner or his authorized representative rejects the recommendation of the MLD, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

MM-CULT 2 Prior to the issuance of grading permits, applicant shall submit a signed paleontological monitoring contract to the City, specifying that the developer shall monitor older, undisturbed alluvium deposits, especially in the northeastern portion of the site where the likelihood of disturbing paleontological resources is highest. The monitor shall remove sediments likely to contain the remains of small fossil vertebrates and invertebrates and, also, shall be prepared to salvage fossils quickly. The monitor must have the temporary authority to halt or to divert grading equipment in order to allow for removal of large or abundant specimens. Full time paleontological monitoring shall be performed on the northeastern portion of the project site; periodic monitoring is recommended in the northwestern and southern portions if excavations exceed a depth of 10 feet.

MM-CULT 3 Collected paleontological samples shall be washed to recover small invertebrate and vertebrate specimens, and all recovered specimens prepared for permanent preservation.

MM-CULT 4 Specimens shall be identified and curated and placed in a repository with permanent retrievable storage.

MM-CULT 5 A report of findings, including an itemized inventory of recovered specimens, will be prepared upon completion of the other related steps noted. The report will include a

comprehensive discussion of the significance of all recovered specimens. When provided to the appropriate Lead Agency, the report and inventory will signify completion of the program to mitigate impacts to paleontological resources.

MM-CULT 6 During any earth-moving activities, the developer(s) will take mitigation measures geared to the areas of the site where the majority of significant historical and cultural materials were found. These measures will include but are not limited to the following:

- Complete Phase 2 reports more precisely delineating the site boundary and documenting the history and prehistory of the Two Bunch Palms site
- Conduct fulltime, on-site archaeological monitoring program during all grading into native soils
- Establish sidewalks and walking trails with signage highlighting the history of the site and its role in Native American history of the region
- Along the trails, include photos and (with tribal consent) displays of the archaeological materials discovered during Phase 2 studies
- Produce a program for use of the amphitheater and/or theaters for regular events and gatherings that are open to the public for the Native American community

4.6.6 Level of Significance after Mitigation

Implementation of the mitigation measures listed above will reduce project impacts below a level of significance.

4.7 GEOLOGY/SOILS AND MINERALS

The analysis in this section is based in part on the following documents:

1. *Geotechnical Report*, Landmark Consultants, Inc, December 2005.
2. *Two Bunch Palms Resort Fault Hazard Study*, Landmark Consulting, Inc., October 2005

4.7.1 Setting

The site topography is shown in Figure 1.2-2 in Chapter 1. The site is divided into two distinctive sections by a northwest/southeast-trending Mission Creek Fault, considered the northern branch of the San Andreas Fault. The project site is located within the Alquist-Priolo special study zones.

4.7.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have a significant adverse effect on geology and soils if it does any of the following:

- a) *Exposes 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*
 - ii) *Strong seismic ground shaking*
 - iii) *Seismic-related ground failure, including liquefaction*
 - iv) *Landslides*
- b) *Results in substantial soil erosion or the loss of topsoil*
- c) *Is located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse*
- d) *Is located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property*
- e) *Has soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water*

According to Appendix G of the *CEQA Guidelines*, a project may have a significant adverse effect on mineral resources if it:

- a) *Results in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state*
- b) *Results 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.*

4.7.3 Impacts of Proposed Project

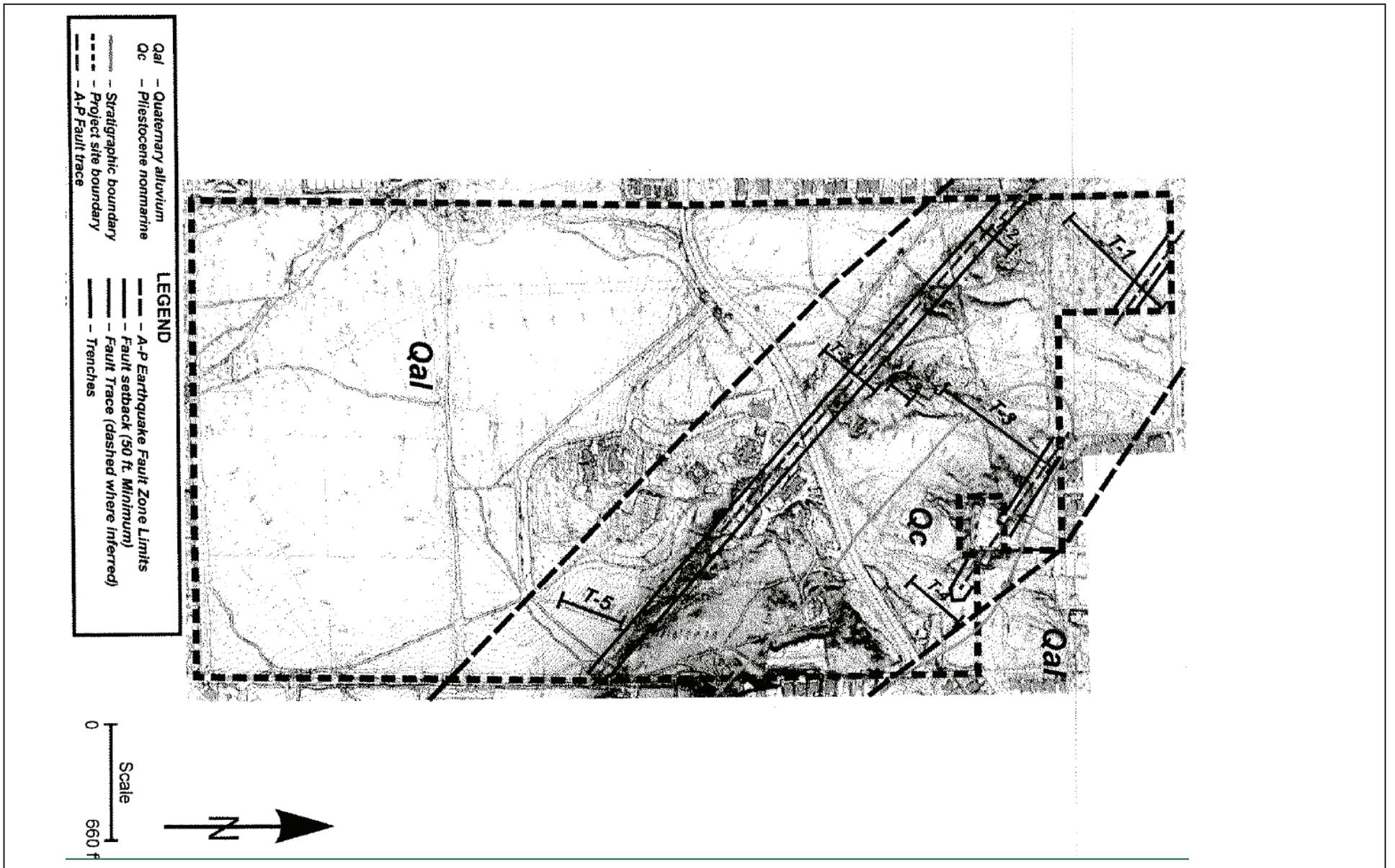
The City of Desert Hot Springs and its Sphere of Influence area contain active and potentially active faults. The primary seismic hazard to the site is strong ground shaking from earthquakes along the San Andreas and San Jacinto Faults. Based upon the historical and prehistoric record, the Coachella Valley segment of the San Andreas fault is likely to generate a magnitude five point nine (5.9) or greater earthquake within in the next 50 years. Strong ground motion induced by active faults within the region is the most significant hazard for this project site. Surface fault rupture is also possible.

There is the potential for seismic-related liquefaction as determined by LandMark Engineers in the Geological Report. Liquefaction is the sudden loss of soil strength due to rapid increases in pore pressures within non-cohesive soils as a result of repeated cyclic loading during seismic events. For liquefaction to occur, the water table must be relatively shallow, the soils must be loose with low density, the soils need to be poorly graded and fine, and seismically induced accelerations must occur. Such liquefaction could result in project area settlement of up to 1.5 inches. The water table is only twelve feet below ground surface at some locations within the project area; therefore, there is liquefaction potential. There is also the potential for landslide on the project site due to the topography and seismic risk associated with fault traces.

Structurally, the Salton Trough is dominated by northwest-trending strike slip faults, most notably the San Andreas Fault Zone, a strike slip fault that has been traced from the Gulf of California to Point Arena in Mendocino County in northern California, where it plunges into the Pacific Ocean. The Coachella Valley is one of the more seismically active areas of California. Recent seismic events that have affected the Valley include the following:

- Desert Hot Springs - 1948 (6.5 magnitude (m))
- Palm Springs - 1986 (5.9 m)
- Desert Hot Springs -1992 (6.1 m)
- Landers -1992 (7.2 m)
- Big Bear -1992 (6.6 m)

The State of California has established building code standards for all seismic zones and the legislature determined areas of special consideration as delineated in the Alquist-Priolo Earthquake Study Zone. The Alquist-Priolo Earthquake Study Zone transects the SP site in a northwest to southeast trending line and incorporates approximately one-third of the site (see Figures 4.7-1 and 4.7-2). In their examination of the site, the engineers from LandMark dug several trenches to confirm the locations of fault traces.



LSA

FIGURE 4.7-1

Two Bunch Palms

Alquist Priolo Earthquake Study Zone and Fault Trace Setbacks

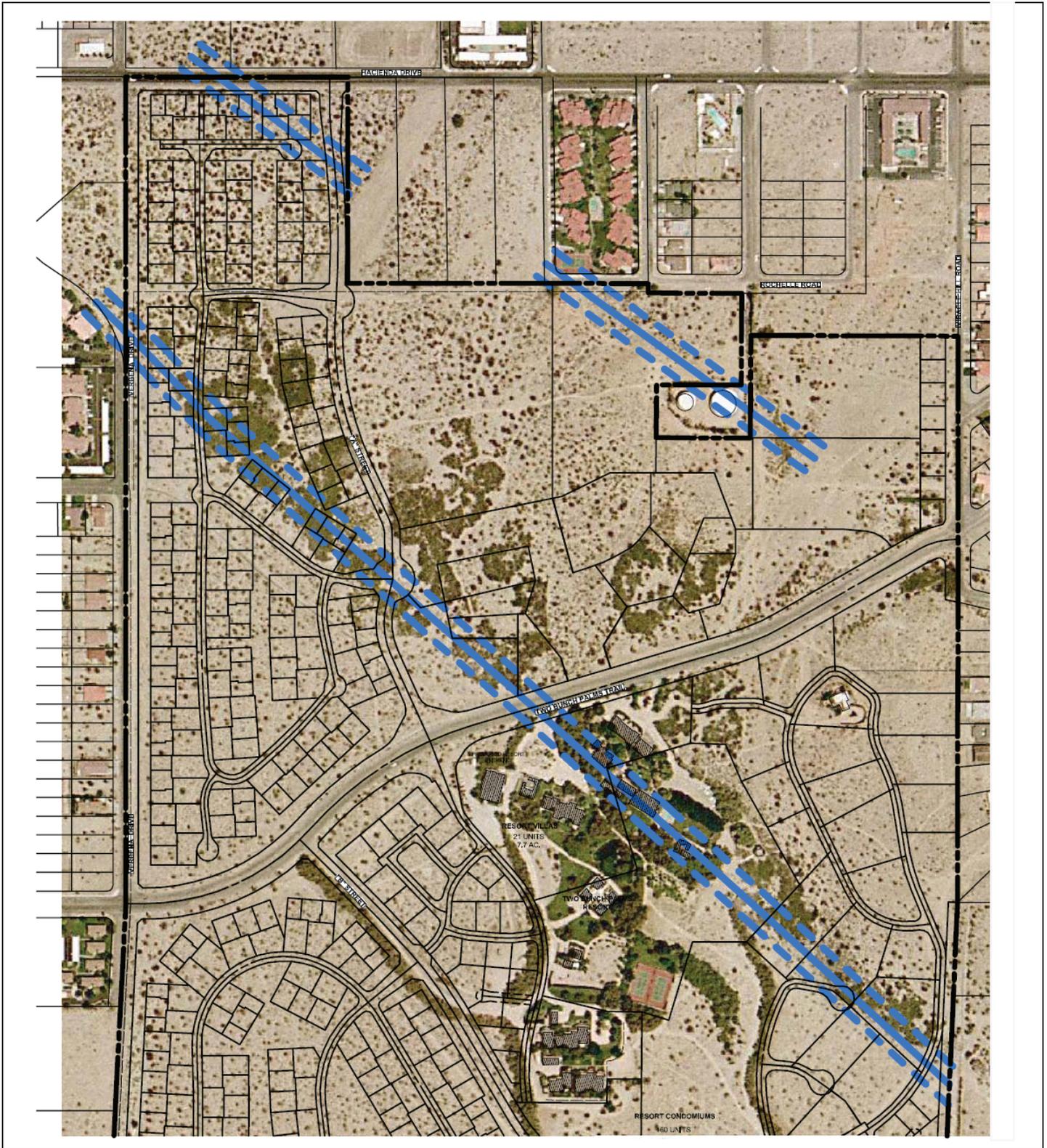
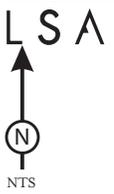


FIGURE 4.7-2



SOURCE: Keith Hall Architects

P:\JHK530_Two Bunch Palms\Graphics\Figure 4.7-2 Two Bunch Palms Fault Zones.pdf

Two Bunch Palms EIR
Two Bunch Palms Fault Zones

A section of the southwest corner of the subject property lies within a 100-year flood hazard area. The majority of the project site lies within the 500-year flood plain zone.

There are no known mineral resources of value on the project site.

4.7.4 Summary of Impacts

The proposed Two Bunch Palms SP project may result in the following potentially adverse effects on geology and soils:

IMPACT GEO-1 The proximity of fault traces within the Alquist-Priolo Earthquake Study Zone and soil condition indicate the potential for strong ground motion on the project site.

IMPACT GEO-2 Strong ground shaking can lead to liquefaction, which in turn can lead to excessive settlement, ground rupture, lateral spreading, or failure of shallow bearing foundations.

IMPACT GEO-3 Surface fault rupture is possible because a splay of the Mission Creek Fault is inferred across the central portion of the project site in a northwest to southeast direction.

IMPACT GEO-4 Rupture of water tanks could result in flooding.

4.7.5 Mitigation Measures

MM GEO-1 Design shall comply with the latest edition of the California Building Code for Seismic Zone 4 using the seismic coefficient provided in the Geotechnical Report by LandMark Consultants.

MM GEO-2 Liquefaction impacts shall be mitigated by vibro-compaction, vibro-replacement, geopiers, stone columns, compaction grouting, or deep dynamic compaction. Other means include a deep foundation system, rigid mat foundations, and grade-beam reinforced foundations that can withstand some differential movement or tilting.

MM GEO-3 Proposed Residential Resort Lots identified in the VTTM will be modified so that lots and appropriate building sites are located outside the fault and setback zones shown in Exhibit 4.7-2.

MM GEO-4 All water tanks shall be designed to MSWD standards.

4.7.6 CEQA Level of Significance after Mitigation

Impacts will be reduced below a level of significance upon implementation of the proposed mitigation measure.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The analysis in this section is based on the following documents:

1. *Asbestos Containing Building Materials Survey*, AllWest Environmental, Inc. (2004)
2. *Environmental Site Assessment*, AllWest Environmental, Inc. (2004)

4.8.1 Setting

The site assessment was conducted by AllWest Environmental, Inc. Agency lists indicate there are no known hazardous material sites within the proposed project area. Previous underground storage tanks were removed in 1996 under direction of the Riverside County Department of Environmental Health. Asbestos-containing material samples were obtained from the areas that will be renovated; it is recommended that the asbestos be removed.

The project site is not located within the boundaries of an airport land use plan or within two miles of a public or private airport or airstrip, so it is not expected to impact the safety of people working or living in the area.

4.8.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have significant adverse impact related to hazards and hazardous materials if it does any of the following:

- a) *Creates a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials*
- b) *Creates 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*
- d) *Is located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment*
- g) *Impairs implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan*
- h) *Exposes 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*

4.8.3 Impacts of Proposed Project

The proposed land uses will not involve the production, storage, or distribution of hazardous substances except normally-occurring household hazardous wastes such as cleaning products and

paints. The range of land use activities proposed on the project site will not allow for the use, storage, disposal, or transport of large volumes of toxic, flammable, explosive or otherwise hazardous materials that could cause serious environmental damage in the event of an accident. No additional mitigation is necessary.

Improper removal of asbestos can cause the release of asbestos fibers and cause a health hazard. The asbestos found on the existing developed areas of the project site needs to be properly removed and disposed of in a permitted landfill by a licensed asbestos contractor following appropriate protocols. Should additional asbestos be found during renovation, it should be properly removed and disposed of. Mitigation is required.

The project itself will not impair or interfere with implementation of an emergency response plan. The project will be required to provide internal circulation with access points to existing roadways, providing adequate emergency or secondary access for evacuation needs and emergency vehicle response needs. No additional mitigation is required.

4.8.4 Summary of Impacts

The primary impact is the potential of encountering asbestos in existing construction. Second, during grading, there remains a remote chance of encountering a buried underground storage tank.

IMPACT HAZ-1 During renovations, additional asbestos may be found.

IMPACT HAZ-2 During grading, there remains a remote chance of encountering a buried underground storage tank.

4.8.5 Mitigation Measures

MM HAZ-1 Prior to the approval of a grading plan, the project proponent will provide evidence to the City Engineer / Building Official that any asbestos hazard has been removed and disposed of at a permitted landfill following appropriate protocols. If additional asbestos is found during renovations, renovations will stop and the asbestos will be removed and disposed of in a permitted landfill by a licensed asbestos contractor following appropriate protocols.

MM HAZ-2 Prior to the approval of a grading permit, the City Engineer / Building Official will ensure that the following condition has been applied to the grading plans: If an underground storage tank is discovered during construction, work will halt in the area until an evaluation of a potential release has been completed. If a release has occurred, proper notifications will be made to local and State officials, and appropriate protocols will be followed to determine cleanup requirements.

4.8.6 Level of Significance after Mitigation

Project impacts to hazardous materials are reduced below a level of significance.

4.9 HYDROLOGY AND WATER QUALITY

The analysis in this section is based in part on the following documents:

1. *Althouse and Mead Memorandum*, December 2005
2. *Post Development Preliminary Hydrology Report*, June 2006

4.9.1 Setting

The project is located outside the 100 year flood plain as shown on the Flood Insurance Rate Maps (FIRMs) prepared by the Federal Emergency Management Agency.

The project site lies in the Desert Hot Springs Subbasin of the Coachella Valley Groundwater Basin. The Mission Creek Fault, which traverses the project site, acts as a natural barrier to groundwater flow. Thus the groundwater table is significantly higher on the northeast side of the fault. The location of the natural artesian hot springs well is located in the area of the fault line on the northeast section of the project site. Depth of the groundwater ranges from approximately 12 feet below ground surface northeast of the fault to approximately 300 feet below ground surface southwest of the fault.

The site is remote from existing water bodies and is not subject to seiches or tsunamis.

4.9.2 Thresholds of Significance

According to the *CEQA Guidelines, Appendix G*, a project may have substantial adverse effect on hydrology or water quality if it will:

- a) *Violate any water quality standards or waste discharge requirements*
- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)*
- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that will result in substantial erosion or siltation on- or off-site*
- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that will result in flooding on- or off-site*
- e) *Create or contribute runoff water that will exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff*

- f) *Otherwise substantially degrade water quality*
- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map*
- h) *Place within a 100-year flood hazard area structures that will impede or redirect flood flows*
- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam*
- j) *Result in inundation by seiche, tsunami, or mudflow*

Note: Please see “Mineral Resources” and “Utilities” for further discussion regarding hydrology.

4.9.3 Impacts of Proposed Project

Development of the project will result in increases of impermeable surface and landscape areas that could produce urban runoff, which tends to include substances used in landscaping, such as fertilizer and pesticides associated with maintenance, and other pollutants such as oils from road or high concentration. (These tend to occur in the “first flush” runoff from storms after a period of drought.) Each of these factors could potentially contribute to groundwater changes. Please refer to mitigation measures below.

The Riverside County Flood Control District is responsible for the management of regional drainage within and in the vicinity of the City of Desert Hot Springs. The still current 1982 Master Drainage Plan for the City was prepared by the District.

Additionally, the Plan’s EIR describes water quality/resources as follows:

“Analyses by the US Geological Survey and the California Department of Water Resources of groundwater basins underlying the Coachella Valley have determined that these basins are separated into distinct subbasins and subareas within subbasins. However, fault barriers that create constrictions in the basin profile, and areas of low permeability limit and control the inflow and movement of groundwater.”

According to the *Post Development Preliminary Hydrology Report*, all proposed project storm flows are conveyed directly to the Riverside County Flood Control District and Water Conservation District (RCFCWCD) detention basin with the use of catch basins and pipes in the street or dedicated easements. The basin was sized by the RCFCWCD and proposed volumes were provided to EDA design professionals. The proposed basin occupies approximately 17 acres and has a volume of 140 acre-feet. Storm flows are released from this basin into the existing flood easement to the south of the project.

The proposed storm flows for this project are as follows:

	Area (ac)	10 Year Flow (cfs)	100 Year Flow (cfs)
Area 1	106	216.3	346.8
Area 2	163	205.8	341.9

One of the proposed amenities of the project is a series of water courses utilizing on-site hot water sources. Although the water will be drawn from wells, and most of it will percolate back into the groundwater supply via retention basins, some still will be lost to evaporation.

Project build out will increase wastewater flows. Anticipated flows will be accommodated through sewer mains, so no impacts will result from septic tank or leach field discharge to underground basins. The proposed project will connect to the City's sanitary sewer system, which will convey wastewater generated by the project to the local wastewater treatment plant. At the plant, wastewater is processed to a tertiary level of treatment.

Construction of the project will increase overall water consumption.

4.9.4 Summary of Impacts

Construction of the project will have impacts on storm water, wastewater, and water consumption.

4.9.5 Mitigation Measures

Hydrology and Water Quality

MM HYD-1 Prior to the approval of the final map, the project proponent will submit, and the City Engineer will approve, a final drainage and water quality plan that includes the following elements to address storm flow and water quality issues.

- a) The plan will be based upon a hydrology study and mitigation plan, which implements local and regional requirements, policies and programs.
- b) The plans will demonstrate that off-site storm flows will not be increased, and that all structures in the project are protected from 100-year storm flows
- c) The plan will identify all affected City rights-of-way or easements, or facilities of the Riverside County Flood Control and Water Conservation District, and the plan will require that developer secure any requisite encroachment permits from the City or the District.
- d) The plan will include specific pollution control measures and/or designs that meet the requirements of the National Pollution Discharge Elimination System, and to keep pollutants, including sediment, herbicides, pesticides and oils, out of surface and ground waters.
- e) The plan will address the use, to the greatest practical extent, of on-site storm water retention basins to maximize groundwater recharge (including hot water recharge), to provide additional open space and wildlife habitat value, and to reduce the necessity for and costs associated with off-site storm water conveyance facilities.
- f) For each drainage improvement required by the project, the plan will identify the agency responsible for long-term maintenance of the facility, and the project developer will obtain an authorization letter from the agency that will assume responsibility for maintenance of improvements. Said letter will clearly identify the sources of funding for long-term maintenance of these facilities.
- g) The plan will include measures specifying that roadway intersections be engineered to ensure ponding at such intersections will maximize drainage capacity of the streets and eliminate associated driving hazards.

This mitigation measure will insure that the project will not substantially increase the rate or amount of surface runoff in a manner that will result in flooding on- or off-site.

Water Supplies

MM HYD-2 Prior to the approval of any building permit, the Director of Planning and MSWD will review plans to ensure the following:

- a) Drought-tolerant landscaping and water-efficient irrigation systems will be used in all yard areas as a means of reducing water consumption.

- b) The project developer will install low-flush toilets, low-flow showerheads and faucets in all new construction, in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Administrative Code Section 1601(b), and applicable sections of Title 24 of the State Code.
- c) The project will connect to the City's sewer system. Use of septic tanks will not be permitted.

This mitigation measure will insure that the project minimizes the use of water to the greatest extent feasible.

4.9.6 Levels of Significance after Mitigation

Implementation of the above mitigation measures will reduce project impacts to hydrology and water quality below a level of significance.

4.10 LAND USE AND PLANNING

Note: The relationship to applicable regional plans, such as those of the Southern California Association of Governments, is addressed in Chapter 5.

4.10.1 Setting

Existing Land Uses. The project site is largely undeveloped with the exception of the existing resort/spa development occupying approximately fifty acres. The project site ranges in elevation from 880 to 1,020 feet in elevation, with generally flat terrain in the southwest and sloping terrain in the northeast and east central areas. The 285 gross-acre site is partially developed with the existing spa; the bulk of the site is largely covered with scrub brush. The site is surrounded by a mix of urban development with the lowest density and undeveloped land on the southeast side.

The Two Bunch Palms project is located in the City of Desert Hot Springs in Riverside County, California. The project site is bounded by Camino Campanero on the south, Verbena Drive on the west, Hacienda Drive on the north, and Miracle Hill Road on the west. The existing Two Bunch Palms Spa is located in the central part of the project area.

The Desert Hot Springs City Hall is located approximately 1.5 miles northwest on Pierson Road, with the downtown business section of the City located just east of city hall.

Planned Land Uses. The current Desert Hot Springs General Plan was adopted in September, 2000. The land use designations for the area are Low (R/VS-L), Medium (R/VS-M), and High (R/VS-H) Residential Visitor Serving. Surrounding land use designations are Low Density Residential to the north, east, and the south, and Medium to High Density Residential to the west.

The adjacent areas are primarily single family residential neighborhoods. The Hidden Springs Country Club is southeast of the site and an elementary school is located to the south just across Camino Campanero. A middle school is west of the resort along the south side of Two Bunch Palms Trail; other single-family neighborhoods surround the northern portion of the project with some interspersed undeveloped parcels. All of the surrounding neighborhoods are characterized mostly by one-story, single-family residences on single-level building pads. The street system is generally rectilinear with the longest blocks in a north-south direction.

4.10.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may be deemed to have a significant impact on land use if it will do any of the following:

- a) *Physically divide an established community*
- b) *Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan,*

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

- c) *Conflict with any applicable habitat conservation plan or natural community conservation plan*

4.10.3 Impacts of Proposed Project

Compatibility with Existing Land Uses. The project will not divide nor disrupt an existing community. The density of the proposed development is similar to or higher than others in the area. Existing residents and visitors to the area will notice a change of character as the project grows. However, because the project is consistent with the General Plan Land Use Policies and similar to the land uses envisioned in the General Plan, this change does not constitute a significant adverse effect under the *CEQA Guidelines*, Appendix G: Land Use Planning.

Consistency with Planned Development. The proposed development will require an amendment to the City’s General Plan Land Use Diagram. The project is consistent with the General Plan and Zoning Maps, but it does include a request for extension of the existing Hot Water Overlay Zone to cover the entire site.

Consistency with General Plan Policies. The proposed project is surrounded by several other residential projects. Therefore, it is essentially infill development. Although some others nearby have lower densities than what is proposed at Two Bunch Palms, some higher density senior housing is also close by and provides a sense of what is allowed by the General Plan and Zoning Ordinance.

General Plan Goals and Policies	Two Bunch Palms Specific Plan
Goals	
1. Preservation and enhancement of the predominantly low density, resort residential character of the City.	The project is a mixed use resort/residential project
2. A variety of housing types and densities that will accommodate existing and future residents of the community.	The project proposes a variety of hotel and for-sale residential product types and will increase the diversity of housing types in the community. Therefore, the project is consistent with this goal.
Policies (See note below)	
1. Areas of existing residential development and surrounding vacant lands shall be planned in a manner that preserves neighborhood character and assures a consistent and compatible residential land use pattern.	The project proposes residential, commercial and recreation uses compatible with adjacent existing land uses.
2. Encourage in-fill development on subdivided lands located adjacent to existing residential areas and utilities to maximize the efficient utilization of land and infrastructure.	The project is an infill project.
3. The City shall discourage the discontinuous or leap-frog development of residential subdivisions by	The project is adjacent to existing development.

requiring necessary improvement and/or extension of intervening roadways and infrastructure to serve new development.	
4. Future development within existing or approved planned unit developments shall not exceed the overall density initially approved for the development.	The project is consistent with general plan land uses.
5. Density transfers may occur in planned residential developments in conjunction with the provision of common area amenities and open space. Golf courses, greenbelts, pool areas and other open space uses incorporated into these developments shall be designated as Open Space areas to assure their preservation as such.	The project does not propose any density transfers. Therefore, this policy is not applicable to the propose project.
6. In addition to other policies set forth for open space and hillside designations, additional development parameters to be addressed include slope disturbance, development area and lot coverage, renaturalization and revegetation, and access roads.	Such standards are addressed in the Specific Plan.
7. Residential development standards shall incorporate set backs, height, pad elevations and other design and performance standards that assure privacy while preserving scenic viewsheds from adjoining properties.	The proposed Two Bunch Palms Specific Plan includes requirements for setbacks, height, pad elevations and other design and performance standards to assure privacy
9. Low-income/affordable housing shall not be located within one area of the community, but shall be dispersed where feasible, appropriate, and compatible with surrounding land uses.	The project is not proposing low-income or affordable housing (per the definitions in the General Plan). Therefore, this policy does not apply to the proposed project.

4.10.4 Summary of Impacts

The project conforms to the goals and policies set forth in the General Plan and Zoning Ordinance of the City of Desert Hot Springs.

4.10.5 Mitigation Measures

No mitigation measures are proposed.

4.10.6 CEQA Level of Significance after Mitigation

Project impacts are less than significant.

4.11 MINERAL RESOURCES

The analysis in this section is based in part on the following documents:

1. *City of Desert Hot Springs Hot Water Overlay District* (2004).
2. *Landmark Geotechnical and Hazards Reports* (2005/2006).
3. *Personal Communications, S&S Well Drillers, King Ventures* (October 16, 2006).

4.11.1 Setting

According to the City of Desert Hot Springs General Plan, there are no identified mineral resources on the proposed Project site however hot mineral springs and waters are on the project site.

Desert Hot Springs has long been known for its naturally occurring hot mineral springs and waters produced as a result of various geological features such as the Mission Creek and San Andreas faults. These hot springs provide an identity to the local community, and serve as an important attraction for the Desert Hot Springs visitor and spa industries.

The subject Two Bunch Palms development site has historically utilized these hot springs for its guest and spa services at the resort. There are two (2) developed and operational hot water wells on the property, both located on the northeastern edge of the property near the intersection of Miracle Hill Road and Two Bunch Palms Trail. Both wells operate without pumps. The water has been siphoned off as it naturally rises to the surface, and directed to the resort's hot water storage system. The older of the wells (well #1) is located north of Two Bunch Palms Trail at Miracle Hill. The newer of the wells (well #2) is located just south of the same intersection. In 1999, well #1 was producing 25 gpm at 162 degrees. Well #2 was also producing 25 gpm at 126 degrees. Combined, the wells produced water at a rate of up to 50 gpm at over 140 degrees.

Neither Well #1 or #2 contains a submersible pump. Well #2 is serviced by 40 gallon per minute (gpm) pressurized pumping station in the event that siphoning does not meet instantaneous demands.

These wells distribute the hot mineral waters to a central storage (underground cistern) and distribution system located to the immediate south of the main resort entry. From the well locations, hot water is siphoned to the storage tank, and is mixed with cool fresh waters, to reduce the 140 degree waters typically pulled from the wells. The hot mineral water is then distributed to the resort's hot water (grotto) pools located near the existing spa and restaurant. In 1999 a bypass overflow pipe was installed to direct excess waters from these well sources to a stream and lake system maintained on the resort. Mineral water is also used in some of the spa treatments and limited irrigation use around the spa area.

Hot water production at Two Bunch Palms has not been metered. Well drillers reports suggest that approximately 25 gpm on average (40 acre feet per year - afy) is extracted from the hot water wells at Two Bunch Palms. Because these waters are used to flush the main hot water soaking pool of the resort, water is constantly flowing through the formal soaking pool. These flushed waters are then directed through open channels to the stream and lakes below the spa, and ultimately to a point south of the existing resort where the mineral waters are held to recharge the groundwater basin below the resort. It is estimated that an averaged 15 gpm are flushed or wasted through the system at the present

time, equating to about 24 afy running through and recharging the underwater basin. The difference between 25 gpm produced and 15 gpm flushing waters is attributable to applied irrigation, spillage and evaporation loss.

Policies in the Desert Hot Springs Comprehensive General Plan and a 2004 Hot Water Overlay Zoning Ordinance emphasize the importance of the mineral waters to the tourism economy of the City, and for that reason projects within the overlay district must emphasize the use of those resources in visitor-serving projects that may be proposed.

4.11.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have significant adverse effect on mineral resources if it:

- a) *Results in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the State*
- b) *Results 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*

Taken literally, the Two Bunch Palms project will not have an impact on State-classified mineral resources or locally important mineral resource recovery sites. However, pursuant to a broadly-defined application of these Guidelines to the proposed project, the expanded use of hot mineral waters by the subject project could be considered a potential impact to the regionally significant hot water resources within the City. Such a finding could be made if the project was found to affect the availability (quantity or quality) of those resources in a manner that would reduce resources available to established businesses within the Hot Water Overlay district.

The project site, in part, was declared by the City in 2004 to overlay unique and distinctive geothermal resources. The 2004 Overlay District (some 326 acres) adopted by the City included two (2) distinct hot water zones. One zone, approximately 84 acres, is located along Palm Drive between 12th and 4th Streets. The second zone, approximately 242 acres, occurs generally between Pierson Boulevard and the Project Site, bordered by Foxdale Drive and the Verbena Channel to the west, and Mountain View Road to the east. The Two Bunch Palms site overlies about 108 of these 242 acres, making the subject site the largest single ownership within the Hot Water Zone 2 Overlay District. The Mission Springs Water District estimates that the hot water basin is fairly shallow, approximating 100' in depth.

While no definitive studies have been performed that quantify the overall area of the hot water basin or its capacity within the City, anecdotal assumptions and estimates noted above suggest that Two Bunch Palms will continue to have a significant effect on ground water recharge in the hot water zone (based on the portions of the site included in the City's Hot Water Overlay District). Because most of the produced hot water at Two Bunch Palms is ultimately used to recharge the hot water basin, it is reasonable to expect that this practice be continued based on the expansion plans of the resort. The City's adoption of the Hot Water Overlay District and Development Standards (Municipal Code Section 159.14.040) codified the need to analyze use of these resources in relation to proposed land uses, and if the geothermal resource is found to be used in a manner advancing the City's goals for

the Hot Water Zone, then the application of development standards to insure the resources are used without negative effects on the environment or surrounding similar resource uses.

4.11.3 Impacts of the Proposed Project

Hot Mineral Water Resources. Present use of hot mineral waters on the Two Bunch Palms Resort site is estimated to be approximately 40 acre feet per year (afy). The proposed project would expand that use by about 30%, to a total of approximately 52 afy to facilitate existing uses and the fifteen (15) hot mineral soaking pools proposed for the plan.

Increased pumping of the hot mineral water must be used for spa and visitor-serving purposes, per the Overlay District and General Plan. Extracted mineral waters must be effectively used to recharge the rather shallow hot water underground basins. If the increased waters are not used to recharge the mineral ground water basins, a reduction in ground water levels could result. To avoid this, all extracted mineral waters should be used to recharge the mineral ground water basin in the same fashion as historical practice. This will maximize the beneficial use of this unique geothermal mineral resource.

4.11.4 Summary of Impacts

The proposed Two Bunch Palms SP project may result in the following potentially adverse effects on geothermal mineral resources:

IMPACT MIN-1 Increased mineral water extractions could lead to a depletion of the mineral ground water basin aquifer.

4.11.5 Mitigation Measures

MM-MIN 1 Geothermal mineral waters used at the project shall be collected and concentrated for groundwater recharge purposes in areas suitable for replenishment of the underground geothermal aquifer. This may include reuse for applied irrigation purposes as long as the use of the reclaimed mineral waters for irrigation are applied to areas overlaying the geothermal groundwater basin.

MM-MIN 2 Implement an annual well monitoring program to document geothermal mineral water use at the project, and to maintain historical records concerning overall hot water basin use and replenishment levels. This information shall be provided to the City, MSWD, and the Regional Water Quality Control Board with the contract to provide such services paid by the HOAs in the project area and administered through by City. In the event that hot water levels drop, the applicant shall identify options to reduce withdrawals and develop a water basin maintenance plan to be approved by the City.

4.11.6 CEQA Level of Significance after Mitigation

Mitigations reduce impact below a level of significance.

4.12 NOISE

The analysis of the potential impacts of the proposed Two Bunch Palms SP project related to noise is based in part on the following:

1. *Comprehensive General Plan for the City of Desert Hot Springs (2000)*
2. *EIR for the City of Desert Hot Springs Comprehensive General Plan (2000)*
3. *California CEQA Guidelines (Revised 2004)*
4. *Two Bunch Palms Specific Plan (October 22, 2005)*
5. *Noise Impact Analysis, LSA Associates (2006)*

These references are on file and available for review at the City of Desert Hot Springs.

4.12.1 Existing Setting

The Two Bunch Palms SP project site is located in a largely developed, predominantly residential area where there is only a modest amount of noise, mostly from traffic on Two Bunch Palms Trail and other nearby arterials. Other existing land uses in the area will be subject to the same existing noise sources as the project site.

The City of Desert Hot Springs has adopted interior and exterior noise standard sources as part of the General Plan Noise Element for assessing the compatibility of land uses with transportation-related noise impacts. For noise-sensitive residential uses, the City requires an exterior noise level of less than 65 CNEL for the outdoor living areas and an interior noise standard of 45 dBA CNEL.

The City of Desert Hot Springs General Plan has identified two separate types of noise sources: mobile and stationary. To control mobile or transportation-related noise sources such as freeways, airports, and railroads, the General Plan Noise Element established guidelines for acceptable community noise levels. The most effective method of controlling non-transportation community noise sources (such as speaker phones, trash compactors, air-conditioning units, etc.) is through the application of a community noise ordinance.

4.12.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have significant effect related to noise if it results in any of the following:

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies*
- b) *Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels*
- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project*

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project*
- e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels*
- f) *For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels*

4.12.3 Project Impacts

Construction Noise. Temporary, short-term ambient noise will increase during construction of the proposed Two Bunch Palms SP project. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Grading activities typically represent one of the highest potential noise sources during construction of a project.

The United States Environmental Protection Agency (EPA) compiled data regarding the noise-generating characteristics of specific types of construction equipment. Noise levels generated by heavy construction equipment can range from approximately 68 dBA to levels in excess of 100 dBA when measured at 50 feet. However, these noise levels will diminish rapidly with distance from the construction site, at a rate of approximately 6 dBA per doubling of distance from the noise source. For example, a noise level of 68 dBA measured at 50 feet from the noise source to the receptor will be reduced to 62 dBA at 100 feet from the source to the receptor and will be further reduced by another 6 dBA to 56 dBA at 200 feet from the source to the receptor.

A few existing residential uses in the vicinity of the project site may experience noise during construction of the Two Bunch Palms SP project. This construction noise will be of short duration and will not result in long term noise impacts on the project site or the surrounding area. Mitigation measures to reduce short term impacts are provided later in this section.

Construction of the proposed Two Bunch Palms SP project site may generate limited temporary ground-borne vibration or ground-borne noise impacts on surrounding properties and the existing on-site spa. These impacts are anticipated during ground clearing/grading and excavation phases and will take place only during the daytime hours in accordance with the City's noise ordinance, so these potential impacts will be less than significant.

Long-Term Impacts. Long-term noise sources on build out of the proposed Two Bunch Palms SP project will be characteristic of typical residential, commercial and recreation uses. The major source of noise will be vehicular traffic. The project design will include perimeter walls, landscaping and other noise attenuation measures to ensure that the planned residential uses on the project site will not be adversely impacted by long term noise associated with traffic and other activities on the project site. Existing City of Desert Hot Springs codes and the Uniform Building Code (UBC) provide minimum noise and soundproofing requirements for noise-sensitive land uses such as residential uses.

The areas around the Two Bunch Palms SP project site may experience increased noise levels as a result of traffic generated by the proposed project and by increased human activity on the project

site as a result of daily operations. Point source noises typical of residential areas include people talking, children playing, lawn care equipment operation, support service activities, and vehicular traffic on area roads. Typically, noise levels generated by these sources will not exceed the noise standards for residential uses in the City's Municipal Code.

The Two Bunch Palms SP project site is not within an airport land use plan or within two miles of an airport. Therefore, the proposed project will not be adversely impacted by aviation-related noise.

4.12.4 Summary of Impacts

IMPACT NOI-1 Temporary, short-term noise increases will occur during construction. Additionally, construction in the project area may generate limited short-term, ground-borne vibration or ground-borne noise impacts on surrounding properties.

IMPACT NOI-2 Exterior noise levels for the planned residential uses on the Two Bunch Palms SP project site may experience exterior and/or interior noise levels that exceed City standards.

4.12.5 Mitigation Measures

The following mitigation measures are proposed to reduce the potential short- and long-term adverse noise impacts of the proposed Two Bunch Palms SP project below a level of significance:

MM NOI-1 To minimize short term construction-related noise impacts, the City of Desert Hot Springs will incorporate the following provisions into the grading permit for the Two Bunch Palms SP project:

- All construction vehicles or equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers.
- All stockpiling and/or vehicle staging areas will be located as far as practical from existing residential uses.
- Construction hours and days will be limited according to the City of Desert Hot Springs Noise Ordinance.

MM NOI-2 Prior to the issuance of a grading permit for the proposed Two Bunch Palms SP project, the City of Desert Hot Springs Building Department will review and approve a final construction-level detail noise-attenuation program for the project. The final noise study will incorporate the final grading plans and building setback distances, considering both project buildout and General Plan buildout traffic volumes.

MM NOI-3 To minimize exterior noise impacts, the project applicant shall incorporate the following mitigation measures into their project:

- A sound barrier with a minimum of six feet shall be required to protect outdoor active use areas such as back yards, patios, and balconies associated

with off-site residential land uses within 70 feet of the Two Bunch Palms Trail centerline west of Verbena Drive

- A sound barrier with a minimum height of six feet shall be required to protect outdoor active use area such as backyard, patios, and balconies associated with the proposed project for the following areas:
- Within 53 feet of Hacienda Drive centerline east of Verbena Drive
- Within 76 feet of the Two Bunch Palms Trail centerline east of Verbena Drive

MM NOI- 4 To meet the City's 45 dBA CNEL interior noise standard, the following mitigation measures will be required:

- Air-conditioning systems for off-site noise-sensitive structures shall be required for the following areas:
 - Within 66 feet of the Verbena Drive centerline south of Two Bunch Palms Trail
 - Within 146 feet of the Camino Campanero centerline east and west of Verbena Drive
 - Within 238 feet of the Two Bunch Palms Trail centerline west of Verbena Drive
- Building façade upgrades such as double-paned windows with a minimum rating of STC-30 for the proposed residential structures shall be required within 41 feet of the Two Bunch Palms Trail Centerline east of Verbena Drive
- Air-conditioning systems for the proposed residential structures shall be required for the following areas:
 - Within 179 feet of the Hacienda Drive centerline east of Verbena Drive
 - Within 258 feet of the Two Bunch Palms Trail centerline east of Verbena Drive

4.12.6 CEQA Level of Significance after Mitigation

Mitigation Measure NOI-1 will ensure that construction noise levels and ground-borne vibrations during construction of the proposed Two Bunch Palms SP project will remain within standards established in the City of Desert Hot Springs General Plan and Noise Ordinance.

Mitigation Measure NOI-2 will ensure that residents of the proposed Two Bunch Palms SP project and surrounding area are not exposed to operations-related noise levels in excess of standards established in the City of Desert Hot Springs General Plan and Noise Ordinance.

Implementation of these mitigation measures will reduce the potentially significant adverse short- and long-term noise impacts of the proposed Two Bunch Palms SP project below a level of significance.

4.13 POPULATION AND HOUSING

The analysis in this section is based in part on the following documents:

1. *Comprehensive General Plan for the City of Desert Hot Springs (2000)*
2. *EIR for the City of Desert Hot Springs Comprehensive General Plan (2000)*
3. *California CEQA Guidelines (Revised 2004)*

4.13.1 Existing Setting

The Two Bunch Palms Specific Plan is for a partially developed area of the City of Desert Hot Springs. The setting for this project, the City of Desert Hot Springs, is discussed in the environmental context of the City of Desert Hot Springs General Plan EIR, Growth-Inducing and Cumulative Impacts, Socio-Economics and Housing (VIII-7 and VIII-8). The City of Desert Hot Springs General Plan has been developed to allow the City to maximize its economic future. The General Plan provides policies and programs to create a more viable commercial and industrial base, enhance tourism development, and facilitate development of adequate public services and facilities.

General Plan policies and programs require that individual project applications be reviewed and analyzed to ensure a long-term balance between employment and housing within the City. Necessary analysis may include, but need not be limited to, fiscal impact analysis, economic feasibility studies, and similar documentation. In addition to traditional general and resort commercial development, the Plan encourages economic expansion in the institutional/medical and light industrial sectors to further diversify its economic base.

The City of Desert Hot Springs General Plan also provides a comprehensive Housing Element. The objective of the housing element is to help the City provide adequate housing and public services for the residents of Desert Hot Springs.

4.13.2 Thresholds of Significance

According to the CEQA Guidelines, Appendix G, a project may have significant effect on Population and Housing if it results in any of the following:

- 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)*
- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere*
- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere*

4.13.3 Impacts of Proposed Project

The Two Bunch Palms Specific Plan will provide several types of housing, including single-family residential properties, visitor-serving residential, and senior-oriented residential properties. Two Bunch Palms will support the City of Desert Hot Springs, General Plan/Housing Element Goal 1: “Ensure that a variety of housing types including larger multifamily units, are constructed and rehabilitated throughout the City in all price ranges” (III-52).

As discussed in Section 5, the Southern California Association of Governments (SCAG) has made growth projections for each of the regions and cities within its planning area. SCAG forecasts substantial growth for both the Coachella Valley and the City of Desert Hot Springs. The Two Bunch Palms project is consistent with these projections, and the population projections for the site are accommodated in both the Desert Hot Springs General Plan and SCAG growth projections.

While the addition of a large number of housing units may induce additional growth in the area for commercial and retail development, this growth is part of the goals and plan of the City of Desert Hot Springs General Plan. Therefore, the additional supporting development will have less than a significant impact.

The proposed project will not remove any existing residential units or residents as most of the subject property is vacant and uninhabited.

4.13.4 Summary of Impacts

Impacts will be less than significant. Therefore, no mitigation measures are required.

4.14 PUBLIC SERVICES

The analysis of the potential impacts of the proposed Two Bunch Palms SP project related to public services is based in part on the following:

1. *State CEQA Guidelines* (Revised 2005)
2. *Comprehensive General Plan for the City of Desert Hot Springs* (2000)
3. *EIR for the City of Desert Hot Springs Comprehensive General Plan* (2000)
4. *Two Bunch Palms Specific Plan* (2006)

These references are on file and available for review at the City of Desert Hot Springs.

4.14.1 Existing Setting

Public services in the City of Desert Hot Springs include:

Police Protection. Police protection services in the City of Desert Hot Springs are provided by the City of Desert Hot Springs Police Department (PD).

The PD operates out of the Desert Hot Springs City Hall, approximately 3.5 miles from the Two Bunch Palms SP project site. Response times to the project site are estimated at three to four minutes. Services provided by the PD include patrol, 911 service, criminal and accident investigations, neighborhood policing, animal control, officers on public school campuses, applicant fingerprinting, narcotics enforcement, gang suppression, adult crossing guards, volunteer program, police reserve officers and an explorer post.

The Two Bunch Palms SP project site is already within areas patrolled and served by the City of Desert Hot Springs PD.

Fire Protection and Emergency Medical Services. Fire protection/suppression and emergency medical services in the City of Desert Hot Springs are provided by the Riverside County Fire Department (RCFD), under contract to the City. The City also has a volunteer program that coordinates with the full time RCFD staff.

The City's central fire station is approximately two miles from the project site. Response times to the project site from this station will be approximately three to four minutes. All the stations serving the City of Desert Hot Springs currently meet the required standard of two paid fire fighters per station. Six other RCFD stations in the area provided overlapping coverage to the City of Desert Hot Springs and the Two Bunch Palms SP project site.

The City of Desert Hot Springs is also part of the Integrated Fire Protection system, where calls from the Cities of Coachella, Indio, Indian Wells and Desert Hot Springs are dispatched by the same center. In addition, the City receives many services such as administration, personnel, finance, dispatch, fire prevention, hazardous materials, training, emergency services and arson investigation through this system.

Two approved Specific Plans, Rancho Royale and Skyborne, have been conditioned to provide new fire stations as components of those projects that also serve surrounding areas. These stations will be located in the west part of the City and will reduce service strain on the central fire station, which is most likely to provide fire protection opportunities for the Two Bunch Palms SP project site.

In addition to fire response, the City has adopted building codes geared toward fire prevention and suppression. For example, tile roofs are currently required for all new residential construction in the City of Desert Hot Springs.

Public Schools. Public education services in the City of Desert Hot Springs are provided by the Palm Springs Unified School District (PSUSD). The PSUSD collects fees of \$2.88 per square foot of new residential uses. The existing public schools in the City of Desert Hot Springs are:

Elementary Schools Grades K-5: Bubbling Wells Elementary School
 Edward L. Wenzlaff Elementary School
 Julius Corsini Elementary School
 Two Bunch Palms Elementary School

Middle School Grades 6-8: Desert Springs Middle School

High School Grades 9-12: Desert Hot Springs High School

Public Libraries. The City of Desert Hot Springs is served by a branch of the Riverside County Library System. The facility at 11691 West Drive is approximately 2,065 square feet and contains approximately 20,000 volumes. The County uses an unadopted standard of 0.5 square feet of library space per capita and 1.2 volumes per capita for the City of Desert Hot Springs. Based on this standard, the size of the library facility in the City of Desert Hot Springs is below standard, but the number of volumes per capita is above the standard. This existing library facility is approximately 3.4 miles from the Two Bunch Palms SP project site.

A new 9,000-sf library facility is planned as part of the City of Desert Hot Springs municipal complex. This additional facility will provide adequate library space for the City well into the future.

4.14.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project may have significant effect on public services if it results in substantial adverse physical impacts associated with the provision of 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 these services:

- Fire protection
- Police protection
- Schools
- Parks
- Libraries

4.14.3 Project Impacts

The proposed Two Bunch Palms SP project includes the development of over a thousand residential units, recreation uses and general commercial uses. These proposed land uses will incrementally increase demand for fire, police, library and school services in this area.

Fire Protection and Emergency Medical Services. The proposed Two Bunch Palms SP project is anticipated to increase the emergency and public service needs in the City. It is anticipated that the Two Bunch Palms SP project can be served by the existing fire stations in the City of Desert Hot Springs. No new fire station is anticipated as a result of the proposed project.

The Two Bunch Palms SP project will be designed to minimize fire risk by providing adequate water mains and fire hydrants, constructing roofs with fire retardant materials, and providing adequate access and compliance with the requirements of the fire department. In addition, the project applicant will pay a fee for any additional fire stations or fire department improvements that may necessary.

Police Protection. Although the proposed Two Bunch Palms SP Project will increase the demand for police services in the City of Desert Hot Springs incrementally, the City has not identified any new police facility needs associated with the proposed project. The proposed project will use private security services within its planned resort components. Additionally, the residential and resort communities within the Specific Plan are planned as restricted access (gated) communities. This should minimize trespass and vandalism of the planned units, thereby reducing the need for police services.

The need for additional police services as a result of the Two Bunch Palms SP project will be offset by additional property tax and sales tax revenues directly and indirectly generated by the project.

Public Schools. The proposed Two Bunch Palms SP project will generate students for the PSUSD public schools. Student generation factors used by the PSUSD¹⁰ estimate these numbers of students to be generated by the proposed project:

K-5	1,393	0.2824	393
6-8	1,393	0.139	194
High School	1,393	0.1438	200

Under California State Law, school construction is funded through a combination of local school bonds, State school bonds, and developer fees. The amount of developer contribution is established and limited under State Law. The proposed Two Bunch Palms SP project will pay the required school fees to the PSUSD.

¹⁰ Based on Table 5, Student Generation Rates, "Residential School Fee Justification Study for Palm Springs Unified School District" (David Tausig & Associates, Inc. April 11, 2002)

Public Libraries. The proposed Two Bunch Palms SP project will increase the demand for library services in the City of Desert Hot Springs incrementally. The proposed 9,000 sf facility in the City municipal center will provide adequate library and capacity for the City, including the proposed project. Increased property tax revenue channeled to the City's general fund will supply the new facility. No specific separate dedicated funding source exists for the library, however.

4.14.4 Summary of Impacts

IMPACT PS-1 The proposed Two Bunch Palms SP project will increase demands for fire, public school, and library services in the project area incrementally.

4.14.5 Mitigation Measures

The following mitigation measures will reduce substantially the potential adverse impacts of the proposed Two Bunch Palms SP project related to public services.

MM PS-1 Prior to the issuance of any building permit, the project applicant will pay a fee to be agreed upon by the City and the Riverside County Fire Department for the construction of fire stations or other appropriate Fire Department improvements.

MM PS-2 Prior to the issuance of any building permit, the Director of Planning of the City Engineer and Fire Marshall of Desert Hot Springs will ensure that the following components are incorporated into project plans:

- All water mains and fire hydrants providing fire flows for the project site will be constructed in accordance with the appropriate sections of the California Fire Code 2001 edition, the City of Desert Hot Springs ordinances/policies and the requirements of the Mission Springs Water District.
- All buildings on the project site will be constructed with tile roofing material or otherwise as outlined in the City Code.

MM PS-3 Prior to the issuance of any building permit, the project applicant will demonstrate to the City of Desert Hot Springs that all applicable school impact fees have been paid to the PSUSD.

MM PS-4 Prior to the issuance of any building permit, the project applicant will demonstrate to the City of Desert Hot Springs that all applicable library impact fees, if approved, have been paid.

4.14.6 CEQA Level of Significance after Mitigation

Implementation of Mitigation Measures PS-1 through PS-4 will reduce the project impacts related to public services below a level of significance.

4.15 RECREATION

The analysis in this section is based in part on the following documents:

1. *Comprehensive General Plan for the City of Desert Hot Springs* (2000)
2. *EIR for the City of Desert Hot Springs Comprehensive General Plan* (2000)
3. *California CEQA Guidelines* (Revised 2004)

4.15.1 Existing Setting

Local parks within the City of Desert Hot Springs within two miles of the project site include Mission Springs Park, Corsini Coyote Park, Arroyo Park, Wardman Park, and Hot Springs Park. Regional Recreational areas within three miles of the project site include Big Morongo Canyon Preserve and Joshua Tree National Park.

As described in the City of Desert Hot Springs General Plan, there are seven parks in Desert Hot Springs. The facilities are well used by residents because the parks offer a wide variety of activities. Arroyo Park (3.97 acres) is located between West Drive and Cactus Drive on Arroyo Drive. Wardman Park (6.6 acres) is located at the northwest intersection of Eighth Street and Cactus Drive. Mission Springs Park is located on the south side of Park Avenue, east of Palm Drive and behind the Agua Caliente Hotel. People's Park, provided by Desert Hot Springs Cablevision as a public amenity, is a neighborhood mini- or pocket park located on the northwest corner of Palm Drive and Yucca Street. Corsini-Eastside Park (21.02 acres) is located behind Corsini Elementary School on Hacienda Avenue and Don English Way. Hot Springs Park (3 acres), completed in 1996, was developed as an interactive or interpretive park and is located on the northwest corner of Palm Drive and Eighth Street. Constitution Park (.25 acres), a pocket park with mature trees and turf, a permanent outdoor chess table, and benches, sits among and has been integrated with the Multi-Service Building/Senior Center, the Carl May Community Center/Council Chambers and the City Library on West Drive.

In accordance with the General Plan, hiking and equestrian trails in Desert Hot Springs are located primarily along the wash areas and the foothills, providing access to trails in Joshua Tree National Park area and the Morongo Canyon Preserve. A trailhead at the mouth of Long Canyon provides handicapped access as well as parking for cars and horse trailers. An information kiosk is located one-half mile northeast of Hacienda Drive, just east of the existing City limits.

The Quimby Act was established as State law in 1965 to allow Cities to require new developments to provide new parks, or alternatively, to pay in-lieu fees to provide a funding mechanism for park land acquisition. The residential subdivisions must dedicate parkland or pay in-lieu fees to enable the City to acquire park land on a ratio of three (3) acres of parklands and facilities per 1,000 residents.

4.15.2 Thresholds of Significance

According to the CEQA Guidelines, Appendix G, a project may have significant effect on Recreation if it does any of the following:

- a) *Increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated*
- b) *Includes recreational facilities or requires the construction or expansion of recreational facilities that might have an adverse physical effect on the environment*

4.15.3 Impacts of Proposed Project

The project proposes the new development of 738 residential lots and 600 resort units with common areas that will increase the need for recreational facilities. Parks located less than five miles from the project site include local parks in the City of Desert Hot Springs as well as regional recreational areas.

Assuming 2.5 residents per household and a Quimby Act Dedication Rate of 3.0 acres per 1,000 population, the 738 residential unit project will require the dedication and improvement of 5.54 acres of parkland.

The Two Bunch Palms Specific Plan proposes the dedication of common open space. These passive recreation areas are appropriate forms of recreation space for the anticipated types of residents of the project. Active recreational facilities are also proposed with the mineral water soaking pools located throughout the common areas of the Plan. Almost forty acres of common areas and developed recreational spaces are planned for the residential communities of the Specific Plan. The final plans for each of the parks will be prepared and reviewed by the City as the development of the project progresses.

The City of Desert Hot Springs has adopted a Quimby Act Ordinance that requires new development to include park space at the rate of three acres per 1000 population, or to pay in lieu fees for the development of equivalent park space. Assuming 2.5 persons per household, this requirement calls for approximately 5.54 acres of park space for 738 homes. The developer will be required to pay in-lieu fees to assure that adequate park space is provided.

4.15.4 Summary of Impacts

IMPACT REC-1 The project will increase the need for recreational facilities within the City.

4.15.5 Mitigation Measures

MM REC-1 Prior to issuance of building permits, the applicant shall show proof of Quimby Act fees payment.

4.15.6 CEQA Level of Significance after Mitigation

After mitigation, the project will have a less than significant impact on recreation.

4.16 TRANSPORTATION AND TRAFFIC

This section addresses the project's impacts on transportation and traffic. Transportation modes addressed include:

- Air
- Automotive
- Bus Service
- Railroad
- Bicycle
- Pedestrian

The analysis in this section is based in part on the following documents:

1. *City of Desert Hot Springs General Plan (2000)*
2. *California CEQA Guidelines (Revised 2004)*
3. *Traffic Study, Two Bunch Palms Resort, LSA Associates (2006)*

4.16.1 Existing Setting

The Specific Plan correlates to the above General Plan Policies and programs. Level of Service D or better will be maintained through the mitigation measures presented in this EIR. Coordination with the necessary agencies will continue to ensure maximum efficiency along SR62. The public transit system will expand as needed, as further development continues in the Coachella Valley. The Two Bunch Palms Specific Plan will bring additional jobs to City of Desert Hot Springs, with an expanded spa facility and commercial development, and enhance the City's job to housing balance. The project will consist of mixed-use development with housing near the source of employment. The streets within the development will be installed and maintained as private streets, and will be developed with standards set fourth in the zoning ordinance.

Air Transportation. The site is located approximately 12 miles from Palm Springs International Airport (PSP), 67 miles from Ontario International Airport (ONT), and 120 miles from Los Angeles International Airport (LAX). The flight service at PSP varies seasonally, with additional flights scheduled during peak winter/spring tourist months. Airlines serving PSP include Alaska Airlines, America West, American Airlines, Continental, Delta, Harmony, Horizon, Northwest, Sun County, United, and West Jet. PSP has scheduled international service to Vancouver, British Columbia, Canada, and service to Calgary, Alberta, Canada. ONT is a sub-regional airport for Southern California, with service provided by most major carriers as well as Southwest Airlines. Service is provided to a wide variety of domestic cities, with limited international service. LAX is the major regional and hub airport for southern California, with service provided by most major domestic and international carriers. Frequent service is provided to a wide range of domestic and international destinations.

Automotive Transportation. The following routes are of importance to the City and the Specific Plan area:

Interstate 10. Interstate 10 (I-10) is the primary interregional route serving the Coachella Valley. I-10 is a transcontinental limited access freeway that extends from Santa Monica, California, in the west to Jacksonville, Florida, in the east by way of Los Angeles, Phoenix, Tucson, El Paso, San Antonio, Houston, and New Orleans. In the Coachella Valley, the freeway follows the historic routes of U.S. Highways 60, 70, and 99 and provides three to four travel lanes in each direction. I-10 currently provides a high level of service except during major tourist weekends. The freeway also carries an extremely high volume of truck traffic.

I-10 interchanges serving the City of Desert Hot Springs are located at State Route 62, Indian Avenue, Palm Avenue/Gene Autry Trail, and Date Palm Drive. The latter three facilities can be extremely congested at peak hours; however, Caltrans and CVAG are planning upgrades to increase the capacity of each facility. These improvements are anticipated to be completed by approximately 2009.

State Route 62. State Route 62 (SR-62) is a California State Highway that links I-10 near Whitewater with Yucca Valley, and extends to the Colorado River, generally following the Colorado River Aqueduct. Between I-10 and the Little San Bernardino Mountains, SR-62 provides two travel lanes in each direction with a wide median. By Caltrans standards, the facility is an “expressway” with limited local access provided at widely spaced intersections. The City of Desert Hot Springs General Plan Land Use Graphic indicates a potential future grade-separated interchange at SR-62 and Pierson Boulevard. Existing levels of service on SR-62 are high.

Palm Drive. Palm Drive provides direct access to Two Bunch Palms Trail. Palm Drive is identified in the City’s General Plan as a major arterial providing two lanes in each direction within a 110-foot right-of-way.

Hacienda Avenue. Hacienda Avenue is identified in the City’s General Plan as a minor collector providing one lane in each direction within an 88-foot right-of-way. Hacienda Avenue provides access to the north end of the project site.

Two Bunch Palms Trail. Two Bunch Palms Trail currently has one wide lane in each direction and provides the main access from both east and west to the project site.

Camino Campanero. Camino Campanero is a two lane collector that extends in an east-west direction and borders the project site to the south. Camino Campanero will be extended to Miracle Hill Road in the future year scenarios.

Bicycle Routes. Existing Class III (signed, but no special facilities) are located on Little Morongo Road on the west side of the City. The 1995 CVAG Non-Motorized Transportation Master Plan indicates planned bicycle routes on Indian Avenue and Little Morongo Road, and bicycle lanes on Pierson Boulevard, east of Indian Avenue. No facilities are shown in the immediate vicinity of the project site.

Bus Service. Bus Service in the Coachella Valley is provided by the Sunline Transit Agency; its busses are powered by natural gas. Within Desert Hot Springs, SunBus Route 14 provides a loop service through downtown Desert Hot Springs along portions of Palm Drive, Pierson Boulevard, Hacienda Ave, and Mission Lakes Boulevard. Bus Service is provided adjacent to the site.

Pedestrian Facilities. Few of the existing City streets in the area provide sidewalks or other pedestrian facilities. Standard City practice is to provide sidewalks along arterials as areas are developed.

Railroad Service. The Southern Pacific Railroad line crosses the Coachella Valley with tracks generally adjacent to the south side of I-10. The facility is currently being double tracked. Primary use is freight trains. There is an Amtrak Station in the northern part of Palm Springs near the Indian Avenue and I-10 interchange. The station is served by a train three times per week in each direction on Amtrak's Sunset Limited Line that extends from Los Angeles, California to Orlando, Florida.

4.16.2 Thresholds of Significance

Appendix G of the *CEQA Guidelines* provides that a project may have a significant adverse effect on Transportation if it will:

- a) *Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);*
- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;*
- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location resulting in substantial safety risks;*
- d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- e) *Result in inadequate emergency access;*
- f) *Result in inadequate parking capacity; and/or*
- g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).*

In addition, project conflicts with any relevant Goal, Policy, or Program of the City of Desert Hot Springs General Plan will be considered a significant adverse effect.

As noted in the General Plan discussion, the City of Desert Hot Springs has established a Level of Service Standard of “D” for intersections, and this analysis will use this standard. (The General Plan also calls for LOS “C” for mid-block roadway segments. In developed areas, the capacity of the roadway network is generally constrained by intersections rather than mid-block capacity and the following analysis will therefore focus on intersections.)

4.16.3 Project Impacts

Impacts to Aviation. The project will not affect existing airports or flight tracks. The project will incrementally increase the demand for aviation services. However, the actual impacts of the project on PSP, ONT, and LAX is small in comparison to total existing and projected aviation demand for those facilities.

Impacts to Automotive Transportation. Two Bunch Palms Trail will be improved as a component of the basic project design with curb-to-curb width of 100 feet.

Access to the project site will be provided via entrances at Verbena Drive/Two Bunch Palms Trail, Miracle Hill Road/ Two Bunch Palms Trail, Hacienda Drive, and Camino Campanero.

The internal circulation system is composed of Two Bunch Palms Trail, which traverses the project site, and a number of new internal streets. All residential access will be taken from new private streets.

The Traffic Study was prepared by LSA Associates. The traffic analysis is conducted in the following manner:

- Trip generation is estimated for the Two Bunch Palms project.
- The generated trips are assigned to the local street network based up on the traffic engineer’s estimate of the destination of trips.
- The new trips are added to existing trips on the roadway to generate total volumes, both on a daily and peak hour basis.
- The level of service at each of the Study Area Intersections for each year is evaluated, and any additional improvements required to maintain LOS “D” during a.m. and p.m. peak hours are identified. (The City’s General Plan calls for maintenance of LOS D.)

The project will take place in phases, the first of which is expected to be completed in 2007 (670 residential units plus 61,000 square feet of commercial and mixed use) and all other phases expected to be completed by 2009. With the completion of phase one the following intersections are identified as being potentially affected by the project and falling below the LOS D standard:

- Palm Drive at:
 - Camino Campanero
 - Varner Road

- I-10 Westbound Ramps

With the completion of all phases in 2009, the following intersections are identified as being potentially affected by the project and falling below the LOS D standard:

- Palm Drive at:
 - Camino Campanero
 - Varner Road
 - I-10 Westbound Ramps
 - I-10 Eastbound ramps
- Verbena Drive at:
 - Two Bunch Palms Trail

By year 2009, significantly impacted intersections are programmed to have the following improvements:

- Palm Drive/Camino Campanero- Installation of a traffic signal.
- Palm Drive/Varner Road- Installation of a traffic signal
- Palm Drive/I-10 Westbound Ramps- Addition of one dedicated westbound right turn lane. Modify ramp design to partial cloverleaf design.
- Palm Drive/I-10 Eastbound Ramps- Construction of the Caltrans programmed improvements for the I-10/Palm Drive interchange.
- Verbena Drive/ Two Bunch Palms Trail- installation of a traffic signal

The Traffic studies generate traffic volume forecasts for the affected street system for years 2005 through 2009.

Automotive Parking. All residences will be constructed with at least two-car garages and driveways will be long enough to accommodate standard-length parked cars. Private interior streets are to be wide enough to accommodate parked cars as well. Therefore, the project will provide sufficient parking.

Bicycle and Pedestrian Circulation. Pedestrian circulation will be provided by sidewalks and the trail network through the SP area. Bicycle circulation will rely on the street network. No dedicated Class 1 bike paths are proposed.

Bus Service. Sunline Transit's Sun Bus line #14 serves Desert Hot Springs. The line has a spur along Hacienda Avenue to Don English Way from Palm Drive and is the closest bus service for the SP area. The 14 line terminates in Palm Springs but connects to other lines in both Palm Springs and Cathedral City where transfers can be made to access other parts of the Coachella Valley. Sunline also has an on-demand paratransit service called SunDial, which is accessible to those persons meeting

Americans with Disabilities Act requirements. The SP project will incrementally increase demand for bus and paratransit service, which will not require additional service from the transit agency.

Railroad Service. The project will incrementally increase the demand for railroad service. This increase is expected to be very small and not result in a significant effect.

4.16.4 Summary of Impacts

IMPACT TR-1 The project will generate additional vehicular trips. Without roadway improvements, the local roadway system will be overburdened.

IMPACT TR-2 The project will generate additional bicycle and pedestrian usage. Facilities need to be designed to meet applicable design standards.

4.16.5 Mitigation Measures

The improvements noted above are entirely within the control of the City of Desert Hot Springs (traffic signal installations by the City and developer-installed road widening and improvements) that can be mandated prior to occupancies and use of the proposed developments. The City cannot control the programmed improvements planned by the State Transportation Commission and Caltrans (I-10/Palm Drive interchange). The City must reasonably rely on representations made by the State in its funding and improvements, in order to find this project to create no significant impacts by participating in the cumulative impacts funding model.

The Traffic Impact Analysis calls for the development of certain traffic system improvements on various identified road segments and intersections to coincide with planned phases of the Two Bunch Palms Specific Plan project. These include:

MM TR-1 Prior to the issuance of building permits for the first phase of the development, the Project Proponent will provide fair-share funding to the City of Desert Hot Springs for the following improvements. Fair-share funding will be based upon the proportion of 2009 project-related traffic using the improvement. Specific improvements include:

- Palm Drive/Camino Campanero: Installation of a traffic signal.
- Palm Drive/Varner Road: Installation of a traffic signal.
- Palm Drive/I-10 Westbound Ramps: Construction the Caltrans programmed improvements for the I-10/Palm Drive interchange.
- Verbena Drive/Two Bunch Palms Trail: Installation of a traffic signal.

MM TR-2 Prior to the approval of any building permit, the Project Proponent will pay any required City Transportation Fees and TUMF Fees.

The above mitigation measures will ensure that traffic operations will be maintained at Level of Service "D" or better, consistent with the requirements of the City of Desert Hot Springs General Plan.

4.16.6 CEQA Level of Significance after Mitigation

With the above mitigation measures, the proposed project will have less than significant transportation and traffic impacts.

4.17 UTILITIES AND SERVICE SYSTEMS

The analysis of the potential impacts of the proposed Two Bunch Palms SP project related to utilities and service systems is based in part on the following:

1. *Comprehensive General Plan for the City of Desert Hot Springs (2000)*
2. *EIR for the City of Desert Hot Springs Comprehensive General Plan (2000)*
3. *CEQA Guidelines (Revised 2005)*
4. *Two Bunch Palms Specific Plan (2006)*
5. *Mission Springs Water District Water Supply Assessment, July 2006*

These references are on file and available for review at the City of Desert Hot Springs.

4.17.1 Existing Setting

Natural Gas. Natural gas is provided to the City of Desert Hot Springs by the Southern California Gas Company (SCGC).

Electricity. Electrical service is provided to the City of Desert Hot Springs by Southern California Edison (SCE). Two existing substations serve the City.

Communications. Telephone service is provided to the City of Desert Hot Springs by Verizon.

Water and Wastewater. Water and waste water service is provided to the City of Desert Hot Springs by Mission Springs Water District.

4.17.2 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project will result in potentially adverse effect on utilities and service systems if it:

- a) *Exceeds the wastewater treatment requirements of the applicable Regional Water Quality Control Board*
- b) *Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects*
- c) *Requires or results in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*
- d) *Requires new or expanded entitlements needed to provide water to the project site*
- e) *Results 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*
- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

4.17.3 Project Impacts

Refer to Section 4.9 for discussion of potential impacts of the proposed Two Bunch Palms SP related to domestic water, wastewater treatment, and storm drain facilities.

Adequate service and supplies related to natural gas are available in the vicinity of the project site. The proposed Two Bunch Palms SP project will provide the necessary facilities and connections from the project site to the applicable off site natural gas facilities and pipelines. Therefore, the proposed project will not result in adverse impacts related to natural gas facilities and supplies.

Adequate service and supplies related to electricity gas are available in the vicinity of the project site. The proposed Two Bunch Palms SP project will provide the necessary facilities and connections from the project site to the applicable off site electricity facilities. Therefore, the proposed project will not result in adverse impacts related to electrical facilities and supplies.

Adequate service and supplies related to communications are available in the vicinity of the project site. The proposed Two Bunch Palms SP project will provide the necessary facilities and connections from the project site to the applicable off site communications facilities. Therefore, the proposed project will not result in adverse impacts related to communications facilities and supplies.

Desert Valley Disposal provides services in the area. Household waste from the proposed project will go to the local transfer station and then be disposed of at the nearest available landfill. The proposed project will be expected to generate a level of waste compatible with the calculations in the City's *General Plan Final Program Environmental Impact Report*. As such, landfill capacity will not be significantly impacted by the proposed project.

Adequate service and supplies related to water are available in the vicinity of the project site as determined by the Mission Springs Water District. The Water Supply Assessment determined that there was adequate water supply for the proposed project. The proposed Two Bunch Palms SP project will provide the necessary facilities and connections from the project site to the applicable water facilities and pipelines. Therefore, the proposed project will not result in adverse impacts related to water facilities and supplies.

4.17.4 Summary of Impacts

The proposed Two Bunch Palms SP project will result in less than significant impacts related to utilities and service systems.

4.17.5 Mitigation Measures

The proposed Two Bunch Palms SP project will result in less than significant impacts related to public services and utilities. No mitigation is required.

4.17.6 CEQA Level of Significance after Mitigation

The proposed Two Bunch Palms SP project will result in less than significant impacts related to public services and utilities.

5.0 CUMULATIVE IMPACTS

5.1 CUMULATIVE IMPACTS METHODOLOGY

Section 15130 of the *California Environmental Quality Act (CEQA) Guidelines* defines cumulative impacts as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental effects. While direct project effects are generally focused on the immediate area surrounding a project, cumulative impacts frequently have greater spatial and/or temporal extent, depending on the impacted resource.

Pursuant to Sections 15130(b)(1)(A) and (B) of the *State CEQA Guidelines*, there are two acceptable methods for evaluating cumulative impacts. The first is to use a list of past, present, or probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the project Lead Agency. The second method uses a summary of projections in an adopted General Plan or related planning document, or in a prior environmental document that has been adopted or certified, that described or evaluated regional or area-wide conditions contributing to the cumulative impact.

The following analysis uses the latter approach to analyze the potential for the proposed Two Bunch Palms Specific Plan (SP) project to contribute to cumulative adverse environmental impacts. In this focused EIR, the City's General Plan EIR is the basis upon which cumulative impacts are assessed.

Cumulative impacts are analyzed for each of the environmental parameters analyzed in Section 4.0 as follows:

1. Does the proposed Two Bunch Palms SP project potentially contribute to cumulative impacts for the resource? Such a potential impact will occur when:
 - After mitigation, the proposed project has a significant adverse impact on the resource.
 - After mitigation, if any, the proposed project has a less than significant, but still measurable (incremental), impact on the resource.

If the answer to both tests is no, then the proposed Two Bunch Palms SP project will not contribute to a cumulative adverse impact on the resource.

2. If the answer to question 1 is yes, then the unmitigated significant adverse impacts of the proposed Two Bunch Palms SP project to the resource are combined with other identified significant adverse impacts to the same resource at each analysis level: local, city, sub-regional and regional, and significant adverse cumulative impacts are identified.

5.2 CUMULATIVE IMPACT ANALYSIS BY ENVIRONMENTAL PARAMETER

5.2.1 Aesthetic Resources

Summary of Project Impacts. The analysis in Section 4.2, Aesthetics, determined that the proposed Two Bunch Palms SP project will not result in significant unavoidable adverse impacts related to visual character.

Local Area Level. Most of the planned developments, including the proposed Two Bunch Palms SP project, will consist of modern residences, recreation and open space uses, and some commercial uses. The character of the area will change from desertscape to a character more similar to surrounding developed areas in the City of Desert Hot Springs. This is not considered a cumulative adverse impact.

General Plan Level. The EIR for the Comprehensive General Plan for the City of Desert Hot Springs noted that “The implementation of the General Plan will have limited impact on the visual resources of the City and the Coachella Valley. Development that is facilitated by the plan is largely limited to low density and low elevation residential structures, which will have minimum impact of viewsheds.” However, the impact identified above, the change in aesthetic character from desert rural to more urban uses, applies to all undeveloped areas in the General Plan and the Two Bunch Palms SP project site. The aesthetic character of Desert Hot Springs will change from a small town surrounded by open space to a medium size town with substantial open space due to development on the outskirts of the City. The Two Bunch Palms SP does not contribute to this change. This is not considered a cumulative adverse effect.

5.2.2 Agriculture

The project will not result in the conversion of any agricultural lands to developed uses. Although a cumulative loss of agriculture will be a significant adverse effect that could not be mitigated, the Two Bunch Palms SP project does not add to that effect. Therefore, the cumulative loss of agricultural lands is not significant.

5.2.3 Air Quality

Summary of Project Impacts. As discussed in detail in the Air Quality analysis, the construction of the proposed Two Bunch Palms SP project will result in significant adverse short term air quality impacts.

As discussed in the Air Quality analysis, the operation of the proposed Two Bunch Palms SP project will result in significant unavoidable adverse long term impacts related to reactive organic compounds (ROC), nitrogen oxides (NO_x) and carbon monoxide (CO). The analysis of air quality impacts is inherently cumulative. With the partial exception of CO, the impacts of ROC and NO_x result from the cumulative effect of emissions from a wide range of existing and planned projects throughout the Coachella Valley. CO effects tend to be more localized.

The Air Quality analysis indicates that the operation of the proposed Two Bunch Palms SP project will exceed the SCAQMD's emission thresholds for ROC, NO_x, and CO even with mitigation. However, it is the combination of project emissions with existing emissions and emissions from planned development that actually create this cumulative impact. As such, the cumulative impacts to air quality were addressed in the Air Quality analysis and no additional analysis or mitigation is necessary.

5.2.4 Biological Resources

Summary of Project Impacts. As discussed in detail in the Biological Resources analysis, the proposed Two Bunch Palms SP project will result in limited adverse impacts on biological resources.

Local Area Level. When combined with the other projects, a large part of Desert Hot Springs including the Two Bunch Palms SP project site will be developed and existing flora and fauna will be removed or displaced. As discussed in the Biological Resources analysis, the proposed Two Bunch Palms SP project is nearly surrounded by existing development. This situation has isolated some biological resources within the project area. Therefore, the cumulative impact in the local area is essentially nil, and impacts are mitigated on a site-specific basis.

General Plan Level. The City of Desert Hot Springs General Plan EIR states, "The adoption and implementation of the proposed General Plan is not expected to have a significant adverse impact upon biological resources of the area. However, continued urbanization will contribute to ongoing fragmentation and loss of habitat for a number of species. Continued development also has the potential to introduce exotic and other non-native plant species, which could be harmful to animals and other plants. Indirect impacts resulting from future development could include increased off-road vehicle use, trash dumping, increased noise, and predation by domestic pets." Therefore, the General Plan makes essentially the same conclusion as the area-level analysis.

5.2.5 Cultural Resources

Summary of Project Impacts. As discussed in detail in the Cultural Resources Impacts section, the proposed Two Bunch Palms SP project will not result in potentially significant adverse impacts related to cultural and scientific resources after mitigation.

Potential Cumulative Impacts. Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to cultural and scientific resources after mitigation, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to cultural and scientific resources.

5.2.6 Geology and Soils

Summary of Project Impacts. As discussed in detail in the Geology and Soils Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to geology and soils after mitigation.

Potential Cumulative Impacts. Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to geology and soils after mitigation, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to geology and soils. The EIR for the City of Desert Hot Springs Comprehensive General Plan EIR notes that “Development associated with the proposed General Plan is not expected to significantly increase the exposure of people or property to geotechnical hazards of the region.”

Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to geology and soils, and the General Plan has not identified any City-wide impact to geology and soils, then cumulative impacts related to geology and soils are less than significant.

5.2.7 Hazards and Hazardous Materials

Summary of Project Impacts. As discussed in detail in the Hazards and Hazardous Materials Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to hazards and hazardous materials after mitigation.

Potential Cumulative Impacts. Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to hazards and hazardous materials after mitigation, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to hazards and hazardous materials.

5.2.8 Hydrology and Water Quality

Summary of Project Impacts. As discussed in detail in the Hydrology and Water Quality Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to hydrology and water quality after mitigation.

Potential Cumulative Impacts. Development of the proposed Two Bunch Palms SP project and surrounding area projects will result in increases of impermeable surface and landscape areas, which could produce urban runoff. Urban runoff tends to include substances used in landscaping, such as fertilizer and pesticides associated with maintenance, and other pollutants such as oils from road or high concentrations (these tend to occur in the first-flush runoff from storms after a period of drought). Each project in the local and General Plan areas will be required to implement specific pollution control measures and/or designs that meet the requirements of the National Pollution Discharge Elimination System, and to keep pollutants, including sediment, herbicides, pesticides and oils, out of surface and ground waters. At the General Plan level, each project will be required to include on-site retention and management of storm water flows. Therefore the combined projects in the local and General Plan areas will not result in increased peak storm flows. Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to hydrology and water quality after mitigation, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to hydrology and water quality.

5.2.9 Land Use and Planning

Summary of Project Impacts. As discussed in detail in the Land Use and Planning Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to land use. The project design and the proposed land uses are consistent with existing and planned uses in the vicinity. The proposed Two Bunch Palms SP project will include commercial uses, which is the City's desire for additional commercial and employment opportunities.

Potential Cumulative Impacts. The General Plan notes that, "Impacts associated with the adoption and implementation of the General Plan land use is not expected to be significant." Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to land use, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to land use.

5.2.10 Noise

The project level analysis of noise is inherently cumulative. The analysis in the Noise Impacts section includes anticipated noise increases resulting from other Local Area projects. The General Plan requirements are also addressed. Therefore, no additional cumulative analysis is required, and no cumulative impact to noise is anticipated.

5.2.11 Mineral Resources

Summary of Project Impacts. As discussed in detail in the Mineral Resources segment of the Geology and Soils Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to mineral resources.

Potential Cumulative Impacts. Because the proposed Two Bunch Palms SP project will not result in any adverse impacts related to mineral resources, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to mineral resources.

Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to mineral resources, and the General Plan has not identified any City-wide impact to geology and soils, then cumulative impacts related to mineral resources are less than significant.

5.2.12 Population and Housing

Summary of Project Impacts. As discussed in detail in the Population and Housing Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to population and housing. The project forecasts are consistent with existing regional forecasts and the proposed transportation improvements are consistent with the City of Desert Hot Springs General Plan.

Potential Cumulative Impacts. Because the proposed Two Bunch Palms SP project will not result in adverse impacts related to population and housing, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to population and housing.

5.2.13 Public Services

Summary of Project Impacts. As discussed in detail in the Public Services Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to public services after mitigation.

Potential Cumulative Impacts. The proposed Two Bunch Palms SP project, as well as surrounding area projects, will be required to fund the construction and operation of adequate public facilities. Because the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to public services after mitigation, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to public services.

5.2.14 Recreation

Summary of Project Impacts. As discussed in detail in the Recreation Impacts section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to recreation resources. The proposed project includes the provision of open space and recreation resources as described in Section 3.0, Project Description.

Potential Cumulative Impacts. The proposed Two Bunch Palms SP project will provide open space and recreation resources and will not result in significant adverse impacts related to recreation. Therefore, the proposed Two Bunch Palms SP project will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to recreation.

5.2.15 Transportation and Traffic

Local Area Level. The analysis of Transportation and Traffic included traffic modeling that included other projects in the area. Like Air Quality impacts and Noise impacts, Transportation and Traffic impacts are inherently cumulative. Therefore, the impacts discussed in that section addressed cumulative impacts at the “local area” level.

General Plan Level. The General Plan EIR states that, for the City of Desert Hot Springs as a whole, the development of the General Plan “will not result in significant adverse impacts that cannot be mitigated.” The Two Bunch Palms project is paying for off-site improvements in the form of TUMF fees, other City fees, and direct provision of needed improvements. In addition, future residents will pay gasoline taxes and sales taxes that are specifically earmarked for transportation. These fees and taxes are designed to offset the project’s cumulative impacts to the transportation system. Therefore, cumulative impacts are less than significant.

5.2.16 Utilities and Service Systems

Summary of Project Impacts. As discussed in detail in the Utilities and Service Systems section, the proposed Two Bunch Palms SP project will not result in significant adverse impacts related to utilities and service systems. The proposed project includes the provision of appropriate utility facilities on the project site as described in Section 3.0, Project Description.

Potential Cumulative Impacts. The proposed Two Bunch Palms SP project will provide appropriate utilities and services facilities on the project site. Because the proposed project will not result in significant adverse impacts related to utilities and services, it will not contribute to potentially significant cumulative adverse impacts on the local or General Plan levels related to utilities and services systems.

6.0 ALTERNATIVES TO THE PROPOSED PROJECT

6.1 INTRODUCTION

6.1.1 Overview

Section 15126.6 of the *California Environmental Quality Act (CEQA) Guidelines* requires the consideration and discussion of alternatives to proposed projects. According to the *Guidelines*, “An EIR will describe a range of reasonable alternatives to the project, or to the location of the project, that will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”

Key provisions of the *CEQA Guidelines* on alternatives (Section 15126.6[a] to [f]) are summarized below to explain the foundation and legal requirements for this alternatives analysis:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant adverse effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The No Project Alternative shall be evaluated along with its impact. The No Project Alternative analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the proposed project is not approved.
- The range of alternatives required in an Environmental Impact Report (EIR) is governed by a rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant adverse effects of the project.
- Factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant adverse effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

6.1.2 Alternatives Discussion

Section 21100 of the Public Resources Code and Section 15126 of the *CEQA Guidelines* require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant adverse environmental impacts of the project. Alternatives to the proposed Two Bunch Palms Specific Plan (SP) evaluated in this EIR are:

- **No Project/No Build Alternative:** This Alternative would involve no changes to the existing land uses and conditions on the project site
- **General Plan Consistent Alternative:** This Project Alternative is consistent with the existing General Plan and consists of mostly resort development, with limited residential development.

For each alternative, the analysis in this section provides:

- A description of the alternative
- The impacts of the alternative and the significance of those impacts. Consistent with the *CEQA Guidelines*, the significant adverse effects of an alternative shall be discussed, but in less detail than the significant adverse effects of the proposed Two Bunch Palms SP
- Comparison of the alternative to the proposed Two Bunch Palms SP, specifically addressing the defined project objectives, the feasibility of the alternative, the elimination or reduction of significant adverse impacts of the alternative, and the comparative environmental merits of the alternative

6.1.3 Project Objectives

As discussed earlier in Section 3.2, Project Objectives, the objectives of the proposed Two Bunch Palms SP are to:

- Integrate the naturally-occurring hot springs into the perimeter residential developments as assets to a healthy-living choice; the medicinal properties of the hot springs become available to residents as well as guests of the resort
- Clarify boundaries of residential and visitor-serving development envelopes consistent with the City's recently enacted (2004) Hot Water Overlay District
- Align property lines to match the land use and development envelopes established in the SP by processing a re-subdivision of the underlying properties
- Distinguish between public and private infrastructure and capital improvements needed to support the Phasing Plan
- Establish design guidelines that create coherent master plan uses without unnecessarily limiting individual creativity in architectural design
- Provide for expanding visitor-serving use of the outlying residential land as a part of the Two Bunch Palms Resort and Spa operation

- Execute an Owners Participation Agreement between the City and the property owners to confirm the respective parties' responsibilities in the improvement of the SP site.

The development of the Two Bunch Palms property, as outlined in the SP, will coordinate improvement of the various land uses and supporting infrastructure, utilities, transportation routes, and public services essential to a successful project. A project of this scale requires phasing over several years. To the extent that the SP outlines the order of public and private development and the threshold public and private improvements needed to support phased development plans, this SP meets the primary objective of the developer which is to provide a reliable plan for project phasing and improvements that can be achieved within pre-determined development standards and public infrastructure requirements.

6.2 PROPOSED TWO BUNCH PALMS SPECIFIC PLAN

6.2.1 Project Description

As described earlier in Section 3.0, Project Description, the proposed Two Bunch Palms SP involves the development of the approximately 285 gross-acre (ac) project site with 738 residential lots, 600 resort units (including 55 existing resort units), common areas, commercial center and interior streets. The project also proposes a 121,500 square foot (sf) retail area including movie theaters, a small outdoor amphitheater, restaurants, retail uses, health and wellness facilities, and a day spa.

6.2.2 Significant Unavoidable Adverse Impacts of the Proposed Two Bunch Palms Specific Plan

As discussed in detail in Section 4.0, Existing Setting, Impacts and Mitigation Measures, the proposed Two Bunch Palms SP would result in significant unavoidable adverse impacts after mitigation related to air quality. As discussed in detail in the Air Quality Analysis Section, the operation of the proposed Two Bunch Palms SP will result in significant adverse air quality impacts which cannot be avoided or mitigated to below a level of significance due to threshold standards. It should be noted that, due to the use of the South Coast Air Quality Management District (SCAQMD) methodology, any project of this size would result in significant adverse air quality effects during operations.

As discussed in detail Section 4.0, the proposed Two Bunch Palms Specific Plan would not result in significant unavoidable adverse impacts after mitigation related to aesthetics, agriculture, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems.

6.3 NO PROJECT/NO BUILD ALTERNATIVE

6.3.1 Description of No Project/No Build Alternative

Consistent with Section 15126.6 of the *CEQA Guidelines*, the No Project/No Build Alternative assumes the existing land uses and condition of the project site at the time the Notice of Preparation (NOP) was published. The setting of the site at the time of the NOP was described in detail earlier in

Sections 3.0 and 4.0 with respect to existing land uses and individual environmental issues. The No Project/No Build Alternative represents the baseline conditions for the assessment of the potential impacts of the proposed Two Bunch Palms SP. This Alternative represents the environmental conditions that would exist if no new development of any kind were to occur on site.

The No Project/No Build Alternative anticipates that the current conditions on site would not change. The project site is partially developed with the existing spa but otherwise is largely covered with scrub brush. A mix of urban uses surrounds the project site with the lowest-density and undeveloped land on the southeast side.

6.3.2 Attainment of Project Objectives

Table 6.3-A lists the objectives of the proposed Two Bunch Palms SP and the ability of the No Project/No Build Alternative to meet these defined objectives. As shown, the No Project/No Build Alternative would not achieve any of the defined project objectives.

Table 6.3-A Ability of the Alternatives to Meet the Project Objectives

Project Objectives	Does Alternative Meet the Project Objectives?		
	Two Bunch Palms Specific Plan	No Project/No Build Alternative	General Plan Consistent Alternative
1. Integrate the naturally-occurring hot springs into the perimeter residential developments as assets to a healthy-living choice; the medicinal properties of the hot springs become available to residents as well as guests of the resort.	Yes	No	Yes
2. Clarify boundaries of residential and visitor-serving development envelopes consistent with the City's recently enacted (2004) Hot Water Overlay District.	Yes	No	Yes
3. Align property lines to match the land use and development envelopes established in the Specific Plan by processing a re-subdivision of the underlying properties.	Yes	No	No
4. Distinguish between public and private infrastructure and capital improvements needed to support the Phasing Plan.	Yes	No	Yes
5. Establish design guidelines that create coherent master plan uses without unnecessarily limiting individual creativity in architectural design.	Yes	No	Yes
6. Provide for expanding visitor-serving use of the outlying residential land as a part of the Two Bunch Palms Resort and Spa operation.	Yes	No	Yes

7. Execute an Owners Participation Agreement between the City and the property owners to confirm the respective parties' responsibilities in the improvement of the Specific Plan site.	Yes	No	Yes
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Source: LSA Associates (2006).

6.3.3 Comparison of Impacts

The No Project/No Build Development Alternative assumes that the existing conditions on site would remain unchanged. Therefore, this Alternative would not result in the potentially significant unavoidable adverse long term air quality impacts that would occur under the proposed Two Bunch Palms SP. Specifically, the No Project/No Build Alternative would not result in new adverse air quality impacts associated with the consumption of natural gas, landscape fuel consumption, consumer products, and vehicular emissions.

6.4 GENERAL PLAN CONSISTENT ALTERNATIVE

6.4.1 Description of General Plan Consistent Alternative

The General Plan Consistent Alternative would develop the approximately 285 gross-acre project site with 50 residential lots, 600 resort units (including 55 existing resort units), common areas, a commercial center and interior streets. This Alternative also proposes a 121,500 square foot retail area including movie theaters, a small outdoor amphitheater, restaurants, retail uses, health and wellness facilities, and a day spa. This alternative would include substantially fewer residential units, at 50 units, than under the proposed Two Bunch Palms SP with 738 units. This Alternative would be consistent with the existing General Plan land use designations for the project site.

6.4.2 Attainment of Project Objectives

As shown earlier in Table 6.3-A, this Alternative would meet all the project objectives except Objective 3: Align property lines to match the land use and development envelopes established in the SP by processing a re-subdivision of the underlying properties.

6.4.3 Comparison of Impacts

Because this Alternative includes a substantial increase in the number of resort units compared to the existing conditions (545 additional units), 50 residential units, and commercial and retail uses, it would likely result in long term air quality impacts that would potentially be significant and adverse even with mitigation. Based on the SCAQMD thresholds, a project of fewer than approximately 400 residences might result in long term air quality impact below the SCAQMD thresholds. However, although this Alternative substantially reduces the number of new residential uses on the site, it does include a large number of resort uses and commercial and retail uses that would be expected to result in significant unavoidable adverse operations related air quality impacts. Therefore, this Alternative would not avoid the significant unavoidable adverse long term air quality impact that would occur under the proposed Two Bunch Palms SP.

6.5 ALTERNATIVES CONSIDERED AND REJECTED

The City identified two alternatives that were determined to be infeasible and, therefore, was not evaluated in detail in this EIR. These rejected alternatives are described below.

6.5.1 Alternate Site Location Alternative

Section 15126.6 (f)(2)(A) of the *CEQA Guidelines* describes the key questions and first step in analysis as "...whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location." As described earlier, the proposed Two Bunch Palms SP would result significant unavoidable adverse impacts related to long term air quality. That same significant unavoidable adverse effect would also if the proposed project were relocated elsewhere in the City or this part of the Coachella Valley. The adverse air quality impact created by this development, regardless of the site, would be a result of the continuing and cumulative demand for housing in the Coachella Valley and southern California. The adverse impact would occur as a result of the number of units and the land uses, rather than a specific site location. The *CEQA Guidelines* require that only locations that would avoid or substantially lessen any of the significant adverse effects of a proposed project be considered in the EIR.

Further, the project applicant does not have access to or control over another site in the City or the surrounding area that could accommodate the proposed Two Bunch Palms SP.

In summary, because the significant unavoidable adverse air quality impacts cannot be avoided at another site and because the project applicant does not have another site, the Alternative Site Location Alternative was rejected by the City and was not evaluated further in this EIR.

6.5.2 Smaller Project Alternative

Under this Alternative, a substantially smaller project was considered, smaller than the General Plan Consistent Alternative. Under this Smaller Project Alternative, the approximately 285 gross-ac would be developed with 300 resort units (including 55 existing resort units), common areas, a commercial center and interior streets. This Alternative would include restaurants, retail uses, health and wellness facilities, and a day spa, but not the amphitheater and the movie theaters. This Alternative would not be consistent with the existing General Plan land use designations for the project site and would result in a substantial reduction in the total amount of development allowable on the project site, compared to existing conditions and the existing General Plan land use designations. Further, this Alternative would make it difficult to provide an effective mixed use project and would not be consistent with many of the defined project objectives and the applicant's objective to develop the SP for the project site. For these reasons, this Alternative was rejected by the City and was not evaluated further in this EIR.

6.6 COMPARISON OF THE ALTERNATIVES

As discussed above in Section 5.1, the primary objective of the alternatives analysis is to focus on alternatives capable of eliminating substantially reducing, to below a level of significance, significant unavoidable adverse effects of the proposed project, even if those alternatives would not attain the defined project objectives or are more costly. The No Project/No Build Alternative would avoid the

significant unavoidable adverse long term air quality impacts of the proposed Two Bunch Palms SP. However, this Alternative would not meet any of the defined project alternatives, as shown earlier in Table 5.A.

The General Plan Consistent Alternative would reduce air quality impacts compared to the Two Bunch Palms Specific Plan Alternative, but not to a level below significance.

6.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Build Alternative would be environmentally superior to the proposed Two Bunch Palms SP because no physical impacts would result from implementation of this alternative.

The *CEQA Guidelines* require that if the environmentally superior alternative is the No Project Alternative, "...the EIR also identify an environmentally superior alternative among the other alternatives" (*CEQA Guidelines* Section 15126.6[e][2]). As discussed above, both the proposed Two Bunch Palms SP and the General Plan Consistent Alternative would result in significant unavoidable adverse long term air quality impacts, neither is environmentally superior to the other.

7.0 ADDITIONAL TOPICS REQUIRED BY CEQA

7.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The proposed Two Bunch Palms Specific Plan (SP) project will result in the following significant unavoidable adverse impacts that cannot be mitigated to below a level of significance even with implementation of the mitigation measures, as discussed in detail in Section 4.0, Environmental Evaluation.

7.1.1 Air Quality

Total emissions of carbon monoxide (CO), nitrogen oxides (NO_x), and reactive organic compounds (ROC) generated during the long-term operation (stationary sources and mobile sources) of the proposed Two Bunch Palms SP project will be significant and unavoidable adverse impacts after mitigation. No additional feasible mitigation measures are available to reduce long-term air quality emissions associated with the proposed project to below a level of significance. Therefore, the proposed Two Bunch Palms SP project will result in a significant unavoidable adverse long term air quality impact after mitigation.

For the remaining environmental parameters evaluated in Section 4.0, the potential project impacts are either below a level of significance or can be mitigated below a level of significance based on the mitigation measures provided in Section 4.0.

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The *California Environmental Quality Act (CEQA) Guidelines* mandate that an Environmental Impact Report (EIR) address any significant irreversible environmental changes that will be involved in the proposed action should it be implemented [*CEQA Guidelines*, Section 15126.2(c)]. An impact will fall into this category if:

- The project will involve a large commitment of nonrenewable resources.
- The primary and secondary impacts of the project will generally commit future generations to similar uses.
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project.
- The proposed consumption of resources is not justified, that is, the project results in wasteful use of energy.

Determining whether the proposed Two Bunch Palms SP project may result in significant irreversible effects requires a determination of whether key resources will be degraded or destroyed in such a way that there will be little possibility of restoring them. As discussed above, the proposed project will result in significant adverse indirect impacts related to air quality.

Air quality in the local area will be adversely affected by the proposed Two Bunch Palms SP project. As discussed in detail in the Air Quality Impacts section, it was determined that pollutant emissions associated with the long-term operation will exceed the defined South Coast Air Quality Management District (SCAQMD) thresholds for carbon monoxide (CO), nitrogen oxides (NO_x), and reactive organic compounds (ROC). Implementation of the mitigation measures provided in the Air Quality Impacts section will reduce these potential adverse impacts, but not to below a level of significance.

The proposed Two Bunch Palms SP project will result in development of the project site in new land uses. Natural resources in the form of construction materials and energy resources will be used in the construction and operation of the proposed project, but their use is not expected to negatively impact the availability of these resources in the region.

The proposed Two Bunch Palms SP project will commit the project site to specific uses for the foreseeable future, thereby limiting the range of future uses for the project site. The project site is largely vacant except for the existing resort development on approximately nineteen acres. The introduction of new and productive uses to the project site could be considered a benefit to the surrounding area, resulting in long-term benefits for the City of Desert Hot Springs and surrounding communities.

7.3 GROWTH INDUCEMENT

CEQA requires a discussion of the ways in which the proposed project could be growth-inducing. The *CEQA Guidelines* identify a project as growth-inducing if it fosters economic or population growth or the construction of additional housing either directly or indirectly, in the surrounding environment [*CEQA Guidelines* Section 15126.2(d)]. New employees from commercial and industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. Examples of development that will indirectly facilitate growth include the installation of new roads or the construction or expansion of water delivery/treatment facilities.

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the public and/or private sectors. Development pressures are a result of economic investment in a particular locality. These pressures help to structure the local politics of growth and the local jurisdictions' postures on growth management and land use policies. The land use policies of local municipalities and counties regulate growth at the local level.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, the growth-inducing potential of a project will be

considered significant and adverse if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Southern California Association of Governments (SCAG). Significant adverse growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant adverse impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

The proposed Two Bunch Palms SP project will improve local streets and infrastructure as a condition of the development. However, these proposed improvements will be intended to serve the proposed project, are consistent with the City of Desert Hot Springs General Plan, and are reflected in the long-range planning of regional agencies such as Coachella Valley Association of Governments (CVAG) and SCAG. Therefore, these improvements are not considered growth inducing.

In summary, the proposed Two Bunch Palms SP project is not considered to be growth-inducing.

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