# PORCUPINE CREEK RETREAT

SPECIFIC PLAN
DRAFT EIR
SCH# 2020070474

**Prepared for:**

**PORCUPINE PROPERTIES, LLC**

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# Chapter 1.0 Executive Summary

## 1.1 Overview of the Executive Summary

This chapter has been prepared pursuant to Section 15123 of the California Environmental Quality Act (CEQA) Guidelines, which states that an EIR Summary shall: 1) contain a brief summary of the proposed action; 2) identify each significant effect with proposed mitigation measures that would reduce or avoid that effect; 3) identify alternatives that were designed to reduce or avoid identified significant effects; 4) identify areas of controversy known to the Lead Agency including issues raised by agencies and the public; and 5), identify issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

## 1.2 Summary of the Proposed Action

### 1.2.1 Porcupine Creek Retreat Specific Plan

#### Existing Conditions

The approximately 230-acre Porcupine Creek Estate includes a main residence and adjacent casitas totaling approximately 25,000 square feet, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and shade structures. Currently, the total building area on the estate is approximately 66,500 square feet. In addition, the owner intends to add two additional villas and a fitness pavilion to the private estate in the next several months, as permitted under the existing entitlements. This construction, with related utility installation, will add approximately 15,000 square feet of additional improvements to the private estate. These improvements to the private estate have independent utility and are separate from the proposed retreat project; however, since these improvements were not completed as of the date the NOP was issued, they are not included in this Draft EIR as part of the project baseline. Porcupine Creek ownership encompasses 230-acres, but only 191-acres are proposed for the Porcupine Creek Retreat Specific Plan.

The estate grounds currently accommodate various private recreational amenities including a 19-hole golf course with a clubhouse building, and a tennis pavilion overlooking three tennis courts. In proximity to the main residence is a pool and spa area with private spa treatment rooms, a fitness center, and poolside bar. Primary access for guests is located via a manned gatehouse at the Dunes View entry gate. Staff and delivery access is located at Mirage Road which is also gated and manned. **Exhibit 1.1, *Existing Site Conditions***, displays an aerial image of the project site's current condition.




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# EXISTING SITE CONDITIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
1.1

## Proposed Project

The Porcupine Creek Retreat Specific Plan project ("project") is proposing to develop a retreat within the boundaries of the 230-acre Porcupine Creek private estate, in the City of Rancho Mirage. The project proposes to reposition Porcupine Creek as an exclusive retreat with a total of up to 50 studio, single-bedroom, and multi-bedroom units ("keys"). Proposed upgrades would include up to 27 new keys, and incorporate a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. The rerouting of the golf course intends to maintain the existing fairways with some minor adjustments, all located within estate grounds and bounded by the existing roadways and cart paths. These additions could expand the total building area on the estate from approximately 66,500 square feet to approximately 250,000 square feet. Consistent with existing practices, the proposed, upgraded dining, golf, and spa facilities will be available to retreat guests, but will not be open to the general public. The Porcupine Creek Retreat Specific Plan will occupy approximately 191-acres of the 230-acre Porcupine Creek estate. Areas excluded from the Specific Plan area include the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Conservation Area/Measure V Mountainous Lands.

The applicant is requesting approval of a Specific Plan; a Development Agreement (DA); a General Plan Zoning Map Amendment; a Preliminary Development Plan (PDP); and a Lot Line Adjustment (LLA) as a part of the entitlement process. A brief description of the proposed entitlements is provided as follows:

- Specific Plan: The Specific Plan will cover the entire 191-acre site to provide comprehensive development guidelines, allowable uses, and development standards.
- Development Agreement: The Specific Plan will be accompanied by a Development Agreement that establishes special terms beneficial and mutually agreeable to both the City and the property owner to facilitate project development and to vest the project approvals.
- General Plan Zoning Map Amendment: The General Plan Zoning Map Amendment will amend the General Plan land use designation and zoning from "Very Low Density Residential (R-L-2)," "Private Open Space (OS/PV)," "Floodways and Drainage Channels (OS-W)" and "Mountain Reserve (MR)" to "Specific Plan" with an underlying zoning designation of Resort Hotel (Rs-H).
- Preliminary Development Plan(s): One or more Preliminary Development Plans (PDP) will be submitted, potentially in phases, up to the total buildout allowed by the Specific Plan.
- Lot Line Adjustment: The Lot Line Adjustment (LLA) will adjust existing parcel lines to create a single legal parcel for the Specific Plan property and separate legal parcels for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Conservation Area/Measure V Mountainous Lands located outside the Specific Plan and excluded from the project entitlements specified above.

**Table 1.1, *Proposed Porcupine Creek Land Use Plan Summary,*** provides a summary of the proposed land uses. While **Exhibit 1.2, *Conceptual Site Conditions,*** illustrates the proposed land uses.

**Table 1.1 Proposed Porcupine Creek Land Use Plan Summary**

| Land Use | Acres | Percent of Project |
|---|---|---|
| Retreat | 183.3 | 96 |
| Flood Control Channel (West Magnesia Storm Channel) | 7.7 | 4 |
| **Total** | **191** | **100 percent** |



NORTH

N.T.S.

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# CONCEPTUAL SITE CONDITIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*1.2*

### 1.2.2 Implementing Actions / Other Approvals Associated with the Proposed Project

Pursuant to CEQA Guidelines Section 15367, the City of Rancho Mirage is the Lead Agency and has discretionary authority over the project. This EIR has been prepared as a Project EIR that will be used by the City as part of its consideration of future development of the Porcupine Creek Retreat Specific Plan project site. Other responsible or trustee agencies may also use the EIR in their consideration of permitting of development within the project site. These include but are not limited to Coachella Valley Water District (CVWD), Southern California Edison (SCE), Regional Water Quality Control Board (RWQCB).

The City of Rancho Mirage is the lead agency under CEQA and has the principal approval authority over the proposed project, the following implementing actions and approvals are required by the City:

- Certification of the EIR (EIR 200002)
- Adoption of a General Plan Zoning Map Amendment (GPZMA 200002)
- Adoption of the Porcupine Creek Retreat Specific Plan (SP 200002)
- Approval of a Development Agreement (DA 200002)
- Approval of Preliminary Development Plan
- Approval of Lot Line Adjustment

In addition, the proposed project may require approval of the following plans:

- State Water Resources Control Board Colorado River Basin Region (Region 7)
  - Construction Stormwater General Permit, Notice of Intent to Comply with Section 402 of the Clean Water Act.
  - Construction Stormwater Pollution Prevention Plan (SWPPP).
- South Coast Air Quality Management District
  - PM-10 Plan for compliance with Rule 403.1; Dust Control in the Coachella Valley.

## 1.3 Alternatives to the Proposed Project

This EIR has considered and evaluated alternatives to the proposed project pursuant to the provisions of Section 15126.6 of the State CEQA Guidelines, as amended. Section 15126.6(a) of the State CEQA Guidelines states that:

> *"An EIR shall describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR needs to 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. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."*

State CEQA Guidelines Sections 15126.6 (b) through (f) identifies the key considerations pertaining to, and requirements for, the preparation of the alternatives analysis in an EIR.

### 1.3.1 Alternatives Considered for Evaluation

Three alternatives to the Porcupine Creek Retreat Specific Plan project were considered for evaluation and compared to the proposed project. A fourth alternative was included for informational purposes and is identified as "Alternative 4". The following provides a summary of the Alternatives Analysis provided in Chapter 7, *Alternatives* of the EIR.

#### *Alternative 1: No Project/2020 Buildout of the Site*

According to CEQA Guidelines Section 15126.6 (e) the analysis of alternatives must include the specific alternative of "No Project." The purpose of describing and analyzing a No Project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.

Under the No Project/2020 Buildout Alternative ("Alternative 1"), the project would remain in its current and existing developed condition, with the completion of previously entitled building structures. The previously entitled 2020 buildout facilities include the development of 2 villas (one 4-bedroom and one 2-bedroom), a substation, and fitness pavilion. The No Project/2020 Buildout would continue to operate as the Porcupine Creek private estate property, with the addition of the 2020 buildout facilities and improvements. The existing visual character and visual resources would remain the same.

#### *Alternative 2: Standard Resort with 50 Keys*

Under the Standard Resort (with 50 Keys) Alternative ("Alternative 2"), the project would develop a standard resort with 50 keys. Alternative 2 would require a General Plan Amendment and Zone Change to allow the property to operate as a standard resort. This Alternative proposes the same number of keys as the proposed project and would be open to the public upon operation.

Implementation of Alternative 2 would include 50 resort keys, as well as typical resort uses, such as the development of a main lobby, dining areas, recreational areas, resort shopping frontages, and parking areas for guests. Construction activities of the standard resort would not result in significant impacts. However, operation of the standard resort may include impacts involving traffic, air quality, noise, and greenhouse gas emissions due to its accessibility to the public. The Transient Occupancy Tax (TOT) would also be reduced, compared to the proposed project, in Alternative 2 due to an anticipated reduction in nightly rates to compete with the other resorts in the area.

### *Alternative 3: Retreat with 2020 Buildout Only (Reduced Project)*

Under the Retreat with 2020 Buildout Only Alternative ("Alternative 3"), the project proposes to operate as a retreat (with 25 keys), with development of the previously entitled 2020 buildout facilities. As stated in Alternative 1, the 2020 buildout includes the development of 2 villas (one 4-bedroom and one 2-bedroom), an electrical substation, and a fitness pavilion. The project would require a General Plan Amendment and Zone Change in order to operate as a retreat; however, the existing environmental conditions and visual character would remain the same.

Construction of the two villas, substation, and fitness pavilion would occur; however, impacts would not be significant. Further, significant impacts related to air quality and greenhouse gas emissions would be reduced. Additionally, the Transient Occupancy Tax (TOT) would also be reduced, compared to the proposed project, in Alternative 3, due to the reduced size of the retreat.

### *Alternative 4: 1986 Magnesia Falls Cove Development*

The 1986 Magnesia Falls Cove Development ("Alternative 4") examines the impacts that would result from development of the Magnesia Falls Cove project, which was previously approved by the City of Rancho Mirage in 1986. When approved in 1986, this project included the proposed development of a 530-unit residential development on approximately 119 acres, out of a total contiguous holding of 305.5 acres located within and adjacent to the current Porcupine Creek property. The 1986 proposed development included 140 single family lots, 390 townhouse condominium units, a five-acre neighborhood park, and associated improvements. The single family lots would occur on a total of 60.3 gross acres, or an average density of 2.3 units per gross acre with common open space/recreation facilities. The single family lots were proposed south of the existing developed single-family residential lots, specifically, south of Halgar Road and Gardess Road. The development of the 390 townhouse condominium units would occur on approximately 58.7 acres of the site, or 6.6 units per gross acre. The condominium development was planned between the West and East Magnesia Channels. If this Alternative was limited to the current Porcupine Creek property, with the total number of units reduced proportionately, it would include 111 single family homes and 110 townhouse units.

This Alternative was previously studied in an Environmental Impact Report that analyzed the various impacts of the Magnesia Falls Cove Development. Per the Magnesia Falls Cove Development Environmental Impact Report, impacts to visual resources, biological resources, cultural resources, traffic, air quality, noise, and land use compatibility were identified and required mitigation. Unavoidable significant impacts were identified for the 1986 Magnesia Falls Cove Development regarding biological resources, air quality, and noise impacts. Project related impacts to traffic/circulation, biological resources, cultural resources, visual resources, noise, air quality, and land use compatibility were identified in the Magnesia Falls Cove EIR.

This Alternative 4 is included for informational purposes only and is not proposed for development by the property owner or the City. The entitlements approved for the Magnesia Falls Cove Development (1986) are no longer active on the Porcupine Creek property.

## Alternative Evaluation

**Table 1.2*, Comparison of Proposed Porcupine Creek Retreat Specific Plan and Alternatives***, indicates a summary comparison of impacts associated with the project Alternatives. As displayed in the table, the first row indicates the proposed project and alternatives, while the first column indicates the environmental topic. The Table reveals the environmental impacts of the proposed project and whether Alternative 1, 2, or 3 reduces, increases, or creates similar impacts to the proposed project.

**Table 1.2 Comparison of Proposed Porcupine Creek Retreat Specific Plan and Alternatives**

| Environmental Topic | Impacts of the Proposed Project | Alternative 1 No Project/ 2020 Buildout | Alternative 2 Standard Resort with 50 Keys | Alternative 3 Retreat with 2020 Buildout Only (Reduced Project) |
|---|---|---|---|---|
| Aesthetics | Less than Significant | Reduced (Less than Significant) | Greater (Less that Significant) | Reduced (Less than Significant) |
| Air Quality | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Biological Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Cultural Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Energy | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than Significant) |
| Geology and Soils | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Greenhouse Gas | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Hazards and Hazardous Materials | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than significant) |
| Hydrology and Water Quality | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than significant) |
| Land Use and Planning | Less than Significant | Similar (Less than Significant) | Similar (Less than Significant) | Similar (Less than Significant) |
| Noise | Less than Significant with Mitigation | Reduced (Less than Significant) | Greater (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Public Services | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Transportation | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Tribal Cultural Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Utilities & Service Systems | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than Significant) |
| Wildfire | Less than Significant | Similar (Less than Significant) | Similar (Less than Significant) | Similar (Less than Significant) |

### Environmentally Superior Alternative

The comparative impact analysis of the alternatives served as the basis for determining which Alternative was "environmentally superior" to the proposed project.

Of the Alternatives considered in this Draft EIR section, the No Project/2020 Buildout Alternative is environmentally superior to the other Alternatives because this Alternative would avoid the significant impacts identified for the project. This Alternative also reduces the environmental impacts the most, compared to the other alternatives.

Although Alternative 1 is environmentally superior, it does not meet the objectives of the proposed project. Alternative 1 would not require a Specific Plan that would provide a comprehensive land use plan that establishes development standards, land use regulation, and programs to guide the orderly transition/development of the property, while maintaining flexibility to respond to market conditions and evolving design needs. Under Alternative 1, the Porcupine Creek Estate would not be repurposed as an exclusive, world-class retreat, and would not be capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage. Finally, the No Project/2020 Buildout Alternative would not require the adoption of a Development Agreement.

Overall, the No Project/2020 Buildout is environmentally superior alternative, but it would not meet the project's purpose and objectives to the same extent as the proposed project. Of the remaining alternatives, Alternative 3 (reduced density retreat) would be the environmentally superior alternative because it would cause incremental reductions with respect to the environmental topics specified below. However, Alternative 3 will not substantially reduce or eliminate any significant and unavoidable impacts of the proposed project and would also fail to adequately meet some of the proposed project's basic objectives, including creating a world-class retreat. Refer to **Chapter 7, *Alternatives***, for a comparative analysis of the environmental impacts of the Alternatives versus the proposed project.

## 1.4 Areas of Controversy/Issues to be Resolved

Areas of controversy towards the proposed Porcupine Creek Retreat Specific Plan project were identified during the 30-day circulation period of the Notice of Preparation (NOP). Comments received during the 30-circulation period identified neighbor concerns about air quality, noise, and traffic from existing residents of the Magnesia Falls Cove neighborhood. Concerns regarding air quality have been addressed in **Section 4.2, *Air Quality***, where impacts of the proposed project were determined to be less than significant, and mitigation is not required. Noise impacts during construction and operation of the proposed project are discussed in **Section 4.11, *Noise***. Construction-related noise may occur during construction of the site. However, construction activities that generate noise and vibration are considered to be temporary, intermittent and of short duration. Therefore, they will not present any long-term impacts. In addition, abatement measures were

identified to reduce noise level increases produced by the construction equipment to the nearby noise-sensitive residential land uses. These mitigation measures would occur during project-related construction activities and are indicated as **Mitigation Measures NOI-1** through **NOI-5. Mitigation Measure NOI-1** would ensure that construction activities occur during the hours permitted by the City. **Mitigation Measure NOI-2** would require that construction staging areas and stationary construction noise sources be located in areas at least 600 feet from adjacent residential properties to the maximum extent feasible. **Mitigation Measures NOI-3** through **NOI-5** requires that the equipment used during project construction (vehicles, tools, etc.) be maintained. With implementation of **Mitigation Measures NOI-1** through **NOI-5** during construction of the proposed project, potentially significant impacts would be reduced to less than significant. Traffic impacts are analyzed in **Section 4.13, *Transportation***. As described in that section, the project will not significantly increase traffic in the adjacent neighborhood or have any other significant transportation related impacts. All other related potential impacts resulting from the project have been addressed throughout this Draft EIR.

### Issues to be Resolved

The choice among alternatives is summarized in Section 1.3, *Summary of Alternatives*. A summary of potentially significant impacts and proposed mitigation measures are identified in **Table 1.3, *Summary of Environmental Impacts and Mitigation Measures.***

## 1.5 Summary of Impacts and Mitigation Measures

**Table 1.3** identifies the potentially significant effects of the proposed project, mitigation measures, project features and/or requirements identified to avoid or reduce the identified potentially significant effects to the maximum extent feasible, and the effectiveness of the mitigation measures, project features and/or requirements to reduce the potentially significant effects to a level of less than significant.

**Table 1.3 Summary of Environmental Impacts and Mitigation Measures**

| Potential Impacts on the Environment | Mitigation Measure | Level of Significance after Mitigation |
|---|---|---|
| ***4.1 Aesthetics*** | | |
| a. Adverse effect on scenic vistas<br>b. Impact a Scenic Highway (No Impact)<br>c. Degradation to the visual character or quality of the site<br>d. Light and glare | **Mitigation Measures**<br>None Required | Less than Significant |
| ***4.2 Air Quality*** | | |
| a. Conflict with implementation of applicable air quality plan<br>b. Violate air quality standard or contribute substantially to existing violation<br>c. Cumulatively considerable net increase if any criteria pollutant<br>d. Expose sensitive receptors to substantial pollutant concentrations<br>e. Create objectionable odors | **Mitigation Measures**<br>None Required | Less than Significant |
| ***4.3 Biological Resources*** | | |
| a. Candidate, sensitive or special status species<br>b. Riparian habitat<br>c. Federally protected wetlands (No Impact)<br>d. Movement of wildlife (No Impact) | **Mitigation Measures**<br>**BIO-1:** The project developer shall adhere to the CVMSHCP Conservation Area Land Use Adjacency Guidelines, listed below. This would include removing the existing oleanders within the fence line on the Porcupine Creek property, adjacent to the upper CVWD water tanks.<br><u>CVMSHCP Land Use Adjacency Guidelines for Projects Adjacent to Conservation Areas:</u> | Less than Significant |

| | | |
|---|---|---|
| e. Conflict with local policies (No Impact)<br><br>f. Conflict with applicable habitat conservation plan (No Impact) | **4.5.1 Drainage**<br>Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.<br>**4.5.2 Toxics**<br>Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.<br>**4.5.3 Lighting**<br>For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area.<br>**4.5.4 Noise**<br>Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area.<br>**4.5.5 Invasives**<br>Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall | |

| | | |
|---|---|---|
| | incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.<br>**4.5.6 Barriers**<br>Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.<br>**4.5.7 Grading/Land Development**<br>Slopes associated with site Development shall not extend into adjacent land in a Conservation Area. | |
| ***4.4 Cultural Resources*** | | |
| a. Adverse change to Historical Resources<br>b. Adverse change to Archaeological Resources<br>c. Disturb any human remains, including those interred outside of formal cemeteries (No Impact) | **Mitigation Measures**<br>**CUL-1:** The applicant shall retain a qualified archaeologist that meets the Secretary of Interior's Standards for professional archaeology, in the event that unanticipated discoveries are made. If suspected prehistoric or historical-period archaeological resources are encountered during construction, all construction activities within a 50-foot radius of the find should be halted and a qualified archaeologist should be contacted.<br>**CUL-2:** An approved Agua Caliente Tribal Cultural Resources Monitor shall be present on site if excavations are deeper than 5-10 feet below the ground surface in the previously disturbed golf course areas. Should development occur in undisturbed areas of the property, tribal monitors shall be present prior to the commencement and during ground disturbing activities. If buried cultural deposits are encountered, the monitor may request that destructive construction halt and the monitor shall notify a qualified archaeologist to investigate and, if necessary, prepare a | Less than Significant |

| | | |
|---|---|---|
| | mitigation plan for submission to the State Historic Preservation Office and the Agua Caliente Tribal Historic Preservation Office. | |
| ***4.5 Energy*** | | |
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?<br>b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | **Mitigation Measures**<br>None Required | |
| ***4.6 Geology and Soils*** | | |
| a. Expose people or structures to potential substantial adverse effects involving:<br>i. Rupture of a known fault<br>ii. Strong Seismic Shaking<br>iii. Seismic-related ground failure, including liquefaction<br>iv. Landslides<br>b. Substantial Soil Erosion or loss of topsoil<br>c. Located on an Unstable Geologic Unit<br>d. Located on Expansive Soil<br>e. Soils Incapable of Supporting Septic Tanks or Alternative Water Disposal Systems (No Impact) | **Mitigation Measures**<br>**GEO-1:** All structures proposed onsite shall be engineer designed and constructed to earthquake-resistant parameters in compliance with the latest edition of the California Building Code (CBC).<br>**GEO-2:** As future projects are proposed within the project site, design and construction of habitable structures shall adhere to the latest UBC and CBC as required by the City Engineer.<br>**GEO-3:** Updates to the soils report in the existing project-specific geotechnical investigation would be required to address habitable buildings. | Less than Significant |

| | | |
|---|---|---|
| f. Destroy a unique paleontological resource or site or unique geologic feature | | |
| ***4.7 Greenhouse Gas Emissions*** | | |
| a. GHG Emissions that may Significantly Impact the Environment<br>b. Conflict with Applicable Plan, Policy or Regulation | **Mitigation Measures**<br>None Required | Less than Significant |
| ***4.8 Hazards and Hazardous Materials*** | | |
| a/b. Transport, Use, or Disposal of Hazardous Materials and Accidental Release of Hazardous Materials,<br>c. Hazardous Materials within one-quarter Mile of a School<br>d. Hazardous Materials Onsite Pursuant to Government Code Section 65962.5.<br>e. Safety Hazard to public airport, public airport use, or Within an Airport Land Use Plan (No Impact)<br>f. Interfere with the Adoption or Implementation of an Emergency Response Plan<br>g. Expose People or Structures to a Significant Risk of Wildfires | **Mitigation Measures**<br>**HAZ-1:** Prior to occupancy of the golf course storage and maintenance facilities, the applicant shall provide to the Riverside County Fire Department, a Hazardous Materials Business Plan (HMBP) for review and approval. The information from the HMBP shall be made available to first responders in the County for emergency response activities. All handlers are required to disclose their inventory of hazardous materials in the form of a HMBP. The HMBP shall be kept up to date in a location on-site and be available for review by the Fire Department, as needed. | Less than Significant |
| ***4.9 Hydrology and Water Quality*** | | |
| a. Violation of Water Quality Standards or Waste Discharge Requirements | **Mitigation Measures**<br>None Required | Less than Significant |

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|---|---|---|
| b. Depletion of Groundwater Supplies or Interference with Groundwater Recharge<br>c. Alteration of Existing Drainage Patterns Resulting in<br>i. Erosion or Siltation<br>ii. Runoff Water that Would Exceed Capacity of Existing Stormwater Drainage Systems<br>iii. Degradation of Water Quality<br>iv. Impede or Redirect Flood Flows<br>d. Inundation by Flooding, Seiche, Tsunami or Mudflow<br>e. Conflict or Obstruct Implementation of Water Quality Control Plan or Sustainable Groundwater Management Plan | | |
| ***4.10 Land Use*** | | |
| a. Physically Divide an Established Community (No Impact)<br>b. Conflict with Any Land Use Plan, Policy or Regulation | **Mitigation Measures**<br>None Required | Less than Significant |
| ***4.11 Noise*** | | |
| a. Generation of noise levels in excess of established standards<br>b. Generation of excessive groundborne vibration<br>c. Excessive noise levels due to proximity to an airport or a private air strip (No Impact) | **Mitigation Measures**<br>**NOI-1** Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the permissible hours of 7:00 a.m. to 7:00 p.m. | Less than Significant |

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|---|---|---|
| | **NOI-2** Construction staging areas, as well as stationary construction noise sources such as generators or pumps, should be located at least 600 feet from adjacent residential properties to the maximum extent feasible.<br>**NOI-3** Idling equipment should be turned off when not in use.<br>**NOI-4** During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.<br>**NOI-5** Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging. | |
| ***4.12 Public Services*** | | |
| a. Increased demand on Public Services | **Mitigation Measures**<br>**PS-1** The project shall comply with all applicable federal, state, regional, and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City, and Riverside County Fire Department.<br>**PS-2** Prior to building permits, the project shall pay the City's applicable Development Impact Fees to aid in offsetting the cost of additional law enforcement and fire services. | Less than Significant |
| ***4.13 Transportation*** | | |
| a. Conflict with an applicable plan or policy addressing the circulation system<br>b. Inconsistent with CEQA Guidelines section 15064.3, subdivision (b)<br>c. Increase hazards due to a geometric design feature<br>d. Result in inadequate emergency access | **Mitigation Measures**<br>None Required | Less than Significant |

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|---|---|---|
| | | |
| ***4.14 Tribal Cultural Resources*** | | |
| a. Cause substantial adverse change in significance of tribal cultural resource that is<br>i. A site listed in the CRHR or Local Register, Tribal Cultural Resources<br>ii. A resource determined to be significant to a California Native American tribe. | **Mitigation Measures**<br>**CUL-2:** An approved Agua Caliente Tribal Cultural Resources Monitor shall be present on site if excavations are deeper than 5-10 feet below the ground surface in the previously disturbed golf course areas. Should development occur in undisturbed areas of the property, tribal monitors shall be present prior to the commencement and during ground disturbing activities. If buried cultural deposits are encountered, the monitor may request that destructive construction halt and the monitor shall notify a qualified archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Office and the Agua Caliente Tribal Historic Preservation Office. | Less than Significant |
| ***4.15 Utilities and Service Systems*** | | |
| a. Require or result in construction of new wastewater drainage facilities (No Impact)<br>b. Have sufficient water supplies available<br>c. Result in construction of new wastewater facilities<br>d. Generate excess solid waste<br>e. Comply with federal, state and local management and reduction statues and regulations related to solid waste (No Impact) | **Mitigation Measures**<br>None Required | Less than Significant |
| ***4.16 Wildfire*** | | |
| a. Substantially impair an emergency response plan or emergency evacuation plan | **Mitigation Measures** | Less than Significant |

| | | |
|---|---|---|
| b. Exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire<br>c. Require the installation or maintenance of associated infrastructure that may exacerbate fire risk<br>d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides | None Required | |

# Chapter 2.0 Introduction

## 2.1 Purpose

This project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA). The City of Rancho Mirage is the Lead Agency under CEQA and is responsible for preparing the Draft EIR for the proposed Porcupine Creek Retreat Specific Plan project. The project will require certain discretionary approvals by the City and other governmental agencies. Therefore, the project is subject to environmental review requirements under CEQA. This introduction is included to provide an overview of the purpose, content and format of this Draft EIR and its relation to the City of Rancho Mirage's planning and environmental review process for the proposed project. The Rancho Mirage City Council will consider the information presented in the document in making an informed decision regarding the approval and conditions of approval, or denial of, the project and certification of the EIR.

The purpose of a Draft EIR is to inform decision-makers and the general public of the potential environmental impacts and identify feasible mitigation measures to reduce potentially significant impacts resulting from the proposed Porcupine Creek Retreat Specific Plan project. The project proposes to reposition Porcupine Creek as an exclusive retreat with a total of up to 50 studio, single-bedroom, and multi-bedroom units ("keys"). Proposed upgrades would incorporate a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. The rerouting of the golf course intends to maintain the existing fairways with some minor adjustments, all located within estate grounds and bounded by the existing roadways and cart paths. These additions could expand the total building area on the estate from approximately 66,500 square feet to approximately 250,000 square feet. A detailed description of the project is included in **Chapter 3.0 *(Project Description)*** of this Draft EIR.

The applicant is requesting approval of a Specific Plan; a Development Agreement (DA); a General Plan Zoning Map Amendment; Preliminary Development Plans (PDP); and a Lot Line Adjustment (LLA) as a part of the entitlement process. A brief description of the proposed entitlements is provided in **Chapter 1.0, *Executive Summary,*** of this Draft EIR.

The Draft EIR has been prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.), and with the City of Rancho Mirage CEQA Guidelines to evaluate the potential environmental impacts associated with the implementation of the proposed Specific Plan, anticipated to be developed beginning in 2021. During the year 2020, the construction of villas 6 and 7, the fitness pavilion, and onsite electrical substation will be developed for use as part of the existing private estate, under the previous entitlements. While not part of the proposed retreat project, these

improvements have been excluded from the baseline conditions because they were not completed at the time the NOP was issued for this EIR.

As described in Section 15121 (a) and 15362 of the *State CEQA Guidelines*, an EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. Thus, the purpose of this Draft EIR is to focus the discussion on those potential environmental effects of the project that the Lead Agency has determined could be significant. In addition, where applicable, feasible mitigation measures are recommended that could reduce or avoid significant environmental impacts identified for the project to the maximum extent feasible.

## 2.2 Project History

The Porcupine Creek property was initially entitled in 1997 and thereafter constructed as a private estate compound with various amenities. Since 2011, the property has been remodeled and upgraded to its existing state. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, a fitness center, a gate house, and new villas, with an additional approximate 15,000 square feet planned to be completed in the next few months. In addition to the construction of on-site buildings and recreational facilities, the landscaping and irrigation at the property has also been rehabilitated and remodeled. Porcupine Creek ownership encompasses 230-acres, but only 191-acres of that is proposed for inclusion in the Porcupine Creek Retreat Specific Plan.

Preparation of the Draft EIR includes the preparation of technical studies such as Biological Resources, Cultural Resources, Hydrology and Drainage, Noise, Traffic, etc., and continuing consultation with the appropriate agencies.

## 2.3 Review of the Draft EIR

Upon completion of the preparation of the Draft EIR, the City of Rancho Mirage filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research, State Clearinghouse to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft EIR will be distributed to the Riverside County Clerk, as well as responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code Section 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the City of Rancho Mirage Community Development Department, and on the City's website. The addresses for each location are provided below:

***City of Rancho Mirage***

Development Services
69825 Highway 111
Rancho Mirage, CA 92270
Phone: 760-328-2266
Hours: Monday – Thursday 8:00 a.m. to 12:00 p.m. and 1:30 p.m. to 4:30 p.m.

https://ranchomirageca.gov/our-city/city-departments/planning/

Agencies, organizations, and interested parties who wish to comment on the Draft EIR during the 45-day public review period are requested to provide written comments to:

Majna Dukic, Planning Manager
Development Services
69825 Highway 111
Rancho Mirage, CA 92270
Phone: 760-328-2266
Email: Majnad@RanchoMirageCA.gov

Upon completion of the public review period, written responses to all public comments received will be prepared and included in the Final EIR. Responses to comments received from public agencies will be made available for review at least 10 days prior to the public hearing before the City Council, at which the certification of the EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the project.

## 2.4 Scope of the EIR

### 2.4.1 Notice of Preparation

The City of Rancho Mirage issued a Notice of Preparation (NOP) to prepare a Draft EIR for a 30-day review period between July 27, 2020 and August 25, 2020. Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with the proposed project. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. The Initial Study accompanied the Notice of Preparation of the Draft EIR, and all environmental topics will be addressed in the Draft EIR.

The NOP was sent to the State Clearinghouse and to all responsible agencies, adjacent cities and the County of Riverside, and to interested parties. Issues raised by agencies and the public in response to the NOP were considered in the preparation of the Draft EIR. The NOP and comments received are contained in **Appendix A** of this EIR.

The City received eleven comment letters in addition to the letter received from the Governor's Office of Planning and Research stating that the 30-day review period ended and providing any comments from Public Agencies and Area Residents.

Public Agency Comments

*Agua Caliente Band of Cahuilla Indians*

1. Requests a copy and a map of the records search with associated survey reports and site records from the information center.
2. Requests shapefiles of the area of potential effect.

*Native American Heritage Commission*

1. The NAHC recommends consultation effort, under SB 18 and AB 52, with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.
2. The NAHC provides recommendation in order to adequately assess the existence of significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources.

See EIR Chapter 4, *Environmental Impact Analysis*, Section 4.4, *Cultural Resources,* and Section 4.14, *Tribal Cultural Resources*.

*Riverside County Sheriff's Department*

1. The Riverside County Sheriff's Department does not have any reservations with the proposed project.

See EIR Section 4.12, *Public Services*.

*Riverside County Department of Waste Resources*

1. Notice of receipt and suggestion that the EIR should include the project maximum amount of waste generated from buildout of the project, using appropriate waste generation factors for the proposed land uses.
2. The Riverside County Department of Waste Resources also provided useful information and resources for the analysis of project-related solid waste impacts.

See EIR Section 4.15, *Utilities*.

*Riverside County Flood Control and Water Conservation District*

1. Notice of receipt and note that the project would not be impacted by District Master Drainage Plan facilities, nor are other facilities of regional interest proposed.

*South Coast Air Quality Management District (SCAQMD)*

1. Notice of receipt.
2. Requests that all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets and air quality modeling and health risk assessment input and output files be sent to the agency.
3. Recommendations towards Air Quality analysis, potential mitigation, and health risk reduction strategies were also provided by (SCAQMD).

*SunLine Transit Agency*

1. Notice of receipt.
2. Due to the project's distance from the closest bus route, SunLine is not requesting the addition of any transit amenities, such as a bus turnout and/or shelter as part of the proposed development.

See EIR Section 4.13, *Transportation*.

Area Residents Comments:

*Elliott Miller (Magnesia Falls Cove Resident)*

1. Sharing concern of project-related impacts, specifically air quality, traffic, and noise.

*Jamie Fibiger (Rancho Mirage Resident)*

1. Proposed alternative project name.

*Mary Jane Dante (Magnesia Falls Cove Resident)*

1. Looks forward to public hearings and sharing issues.

*Maxwell Mitchell (Magnesia Falls Cove Resident)*

1. Sharing concern of project-related impacts, specifically air quality, traffic, and noise.

### 2.4.2 CEQA Purpose and Standards for Adequacy

This Draft EIR provides an evaluation of the potential environmental effects associated with the development of the approximately 191-acre Porcupine Creek Retreat Specific Plan project site, within the Porcupine Creek estate, which occupies approximately 230-acres.

As described in Section 15121 (a) and 15362 of the *State CEQA Guidelines*, an EIR is an informational document that apprises public agency decision-makers and the public of any potential significant environmental effects of a project, identifies possible methods to minimize the significant effects, and identifies and addresses reasonable alternatives to the project. Thus, the purpose of this EIR is to focus the discussion on those potential environmental effects of the project that the Lead Agency has

determined could be significant. In addition, where applicable, feasible mitigation measures are recommended that could reduce or avoid significant environmental impacts identified for the project.

This EIR was prepared in accordance with Section 15151 of the *State CEQA Guidelines*, which defines the standards for EIR adequacy as follows:

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

The City of Rancho Mirage directed the preparation of this document in fulfillment of its environmental review requirements pursuant to provisions of the *California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-2117*), *CEQA Guidelines* and the Lead Agency's local CEQA implementation requirements, all as amended.

This EIR is intended for use by decision makers, the general public, and other responsible or interested agencies in the review of the Porcupine Creek Retreat project and related entitlement approvals. This EIR includes mitigation measures that are provided to eliminate or reduce to acceptable levels the environmental impacts associated with the development of the approximately 191-acre project site.

This EIR has been prepared as a project level document that serves as the first tier in the evaluation of the proposed Porcupine Creek Retreat Specific Plan that when approved, would allow the development of up to 27 new studio, single-bedroom, and multi-bedroom units ("keys") for up to a total of up to 50 keys, a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course.

## 2.5 Organization of the EIR

This Draft EIR has been prepared as a Project-level EIR to evaluate the Porcupine Creek Retreat Specific Plan which, when implemented, will guide future development within the Specific Plan boundary. In the City of Rancho Mirage. A comprehensive project description including exhibits and maps is presented in Chapter 3, *Project Description*.

The Draft EIR is organized into the following main chapters and sections:

**Chapter 1: Executive Summary.** This chapter includes a summary of the proposed project and a discussion of the alternatives to the project. A brief description of the areas of controversy and issues

to be resolved, and overview of potential impacts, and the Mitigation, Monitoring and Reporting Program are also included in this section.

**Chapter 2: Introduction.** This chapter provides an introduction and overview describing the purpose of the EIR, a brief history of the project, the scope of the EIR, and the review and certification process. This chapter identifies the documents incorporated by reference in the EIR and where these documents can be reviewed. Finally, this chapter includes a summary of the comments received on the Notice of Preparation.

**Chapter 3: Project Description.** This chapter includes a detailed description of the proposed project, including its location, existing site conditions, project history, and project characteristics. A discussion of the project objectives, intended uses of the EIR, responsible agencies and their roles in the environmental process, and approvals that are needed for the proposed project are also included in this chapter.

**Chapter 4: Environmental Impact Analysis**. This chapter contains a comprehensive evaluation of the environmental impacts of the proposed project. Impacts are organized into major environmental topics. Each section includes a description of the environmental setting (the existing physical environment and the regulatory environment), methodology for evaluating impacts, significance criteria, potential impacts, a discussion of existing rules and regulations imposed on the project by the lead, responsible and trustee agencies to reduce potential environmental effects of the project, project design features built into the project to comply with regulatory requirements such as Title 24 (Energy) and the California Building Code (CBC), proposed mitigation measures (in addition to environmental requirements already imposed on the project by regulatory agencies), and a finding of the level of significance after mitigation. The impact evaluation considers: direct impacts, indirect impacts, and cumulative impacts. The following environmental topics are addressed within Chapter 4.

***Section 4.1 – Aesthetics:*** Addresses visual impacts that may occur with implementation of the proposed Specific Plan.

***Section 4.2 – Air Quality:*** Addresses the local and regional air quality impacts associated with project implementation as well as consistency with the SCAQMD Air Quality Management Plan (AQMP). This section also addresses the potential for odors to affect existing and future sensitive receptors in the vicinity.

***Section 4.3 – Biological Resources:*** Addresses the project's impacts on habitat and wildlife in the area, summarizes the biological resources study prepared for the project. This section provides a summary of the Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP) and evaluates potential impacts associated with the adjacency of the proposed project to the Santa Rosa and San Jacinto Mountains Conservation Area.

***Section 4.4 – Cultural Resources:*** Addresses the impacts of project development on historic, cultural, and archaeological resources. Note: Tribal Cultural Resources are addressed separately in Section 4.14 below.

***Section 4.5 – Energy:*** Addresses the impacts of project development on energy resources during project construction and operation, as well as whether the project will conflict with a state or local plan for renewable energy or energy efficiency.

***Section 4.6 – Geology and Soils:*** Addresses the potential impacts the project may have on soils and assesses the effects of the project in relation to geologic and seismic conditions, including the site's proximity to the Santa Rosa Mountains. This section also addresses paleontological resources.

***Section 4.7 – Greenhouse Gas Emissions:*** Addresses the project's estimated contribution to global climate change through the emission of greenhouse gases during construction and long-term operation of the proposed project.

***Section 4.8 – Hazards and Hazardous Materials:*** Addresses the likelihood of the presence of hazardous materials or conditions on the project site and in the project area or the transport of hazardous materials that may have the potential to impact human health. This section also includes an analysis of the potential for the site to be impacted by wildland fires due to proximity to permanent open space associated with the Santa Rosa and San Jacinto Mountains Conservancy area.

***Section 4.9 – Hydrology and Water Quality:*** Addresses the impacts of the project on regional and local hydrological conditions, including drainage areas, and changes in flow rates; as well as potential impacts that may currently exist that must be addressed during project design to prevent flooding. This section also summarizes the requirements under the County's Municipal Separate Storm Sewer System (MS4) Permit for storm water control, retention and release.

***Section 4.10 – Land Use and Planning:*** Addresses the related land use impacts associated with the implementation of the project, including the project's compatibility with surrounding land uses, and the need for a General Plan Zoning Map Amendment. This section also provides an analysis of the Rancho Mirage General Plan's goals and evaluates the project's consistency with these goals. Finally, this section provides an analysis of the project's relationship and consistency with the CVMSHCP.

***Section 4.11 – Noise:*** Addresses the noise impacts that may occur during construction and operation of future land uses based on compliance with the City's Noise Ordinance.

***Section 4.12 – Public Services:*** Addresses the impacts upon public service providers including fire, police, schools, and other public services.

***Section 4.13 – Transportation:*** Addresses impacts on the local and regional roadway system including emergency access, public transportation, bicycle, and pedestrian facilities, as well as an analysis of vehicle miles traveled (VMT).

***Section 4.14 – Tribal Cultural Resources:*** Addresses the potential adverse impacts to tribal cultural resources; including a summary of the City's Native American consultation with affected tribes.

***Section 4.15 – Utilities and Service Systems:*** Addresses the project's impacts on water supply, wastewater treatment, storm drains, and solid waste. .

***Section 4.16 – Wildfire:*** Addresses the project's impacts on emergency response and evacuation plans in areas located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

**Chapter 5: Other CEQA Required Sections.** This chapter provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts, and any irreversible and irretrievable commitment of resources. This chapter also provides a summary of environmental issues where findings can be made that the project would not cause an impact on the environment or that the impact would be negligible.

**Chapter 6: Effects Not Found to be Significant.** Prior to the development of this Draft EIR, an Initial study was written to determine the significant impacts of the various threshold criteria as determined by the 2020 CEQA Guidelines. This discussion presents the analysis of the insignificant effects related to aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and utilities and service systems, per the 2020 CEQA Guidelines.

**Chapter 7: Alternatives to the Proposed Project.** This chapter compares the impacts of the proposed project with three project alternatives: the No Project Alternative where no development would occur apart from construction of 2020 buildout which is already entitled and under construction, a Standard Resort with 50 keys Alternative, and a retreat with 2020 buildout only. A fourth alternative, the 1986 Magnesia Falls Cove Development Alternative, was included to inform the public of the previously approved 530-unit residential development and its potential environmental effects.

**Chapter 8: References.** This chapter contains a full list of references that were used in the preparation of the EIR.

**Chapter 9: Glossary of Terms.** This chapter contains a full list of acronyms that were used throughout the EIR.

**Appendices.** Includes all notices and other procedural documents pertinent to the preparation of the EIR, as well as all technical material prepared to support the environmental analysis.

# 2.6 Reference Documents

## 2.6.1 Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced several public documents. Information from the documents, has been incorporated by reference, and has been briefly summarized in the appropriate sections(s).

Documents include:

Rancho Mirage General Plan

Rancho Mirage General Plan 2005 Environmental Impact Report

Rancho Mirage General Plan 2017 Addendum to the Final Environmental Impact Report

Porcupine Creek Retreat Specific Plan

Coachella Valley Multiple Species Habitat Conservation Plan

## 2.6.2 Documents Prepared for the Project

The technical studies prepared for the proposed project and other informational documents are listed below, with their corresponding appendices in parentheses. These documents are included in their entirety as part of the appendices for the Draft EIR.

| | |
|---|---|
| Appendix A | Notice of Preparation, Initial Study and Comments Received |
| Appendix B.1 | CalEEMod Model Analysis Proposed Project |
| Appendix B.2 | CalEEMod Model Analysis Specific Plan Buildout |
| Appendix C | Biological Resources Assessment |
| Appendix D | Cultural Resources Assessment |
| Appendix E.1 | Geotechnical Report – Operations Complex and New Villas (2012) |
| Appendix E.2 | Geotechnical Report – Proposed New Tennis Courts and Tennis Facilities Building (2011) |
| Appendix F.1 | Porcupine Creek As-Built Hydrology Report (2014) |
| Appendix F.2 | Porcupine Creek As-Built Hydrology Report (Revised) |
| Appendix G | Noise Impact Analysis |
| Appendix H | Traffic Assessment Memo |

# Chapter 3.0 Project Description

## 3.1 Introduction

This section of the Draft Environmental Impact Report ("Draft EIR") describes the location, objectives, and characteristics of the proposed Porcupine Creek Retreat Specific Plan ("Specific Plan") project ("project") and the intended uses of this Draft EIR, as required by the California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations, Title 14, Section 15000 et. seq. Included in this section is a description of the proposed project's technical, economic, and environmental characteristics. A glossary of terms, definitions, and acronyms used in this Draft EIR are provided in **Chapter 9**.

## 3.2 Project Location

As shown in **Exhibit 3.1, *Regional Location Map***, the project site is located in the southeastern portion of the City of Rancho Mirage ("City"), within the Coachella Valley in Riverside County, California.

The Porcupine Creek Retreat Specific Plan project occupies approximately 191-acres of the 230-acre Porcupine Creek private estate situated at the base of the Santa Rosa Mountains. The project site is located 0.50 miles southwest of Highway 111, and west of the Magnesia Falls Cove neighborhood. Rancho Mirage Elementary School is located adjacent to the property's northern corner, and the Santa Rosa Mountains are located north, west, and south of the project boundaries.

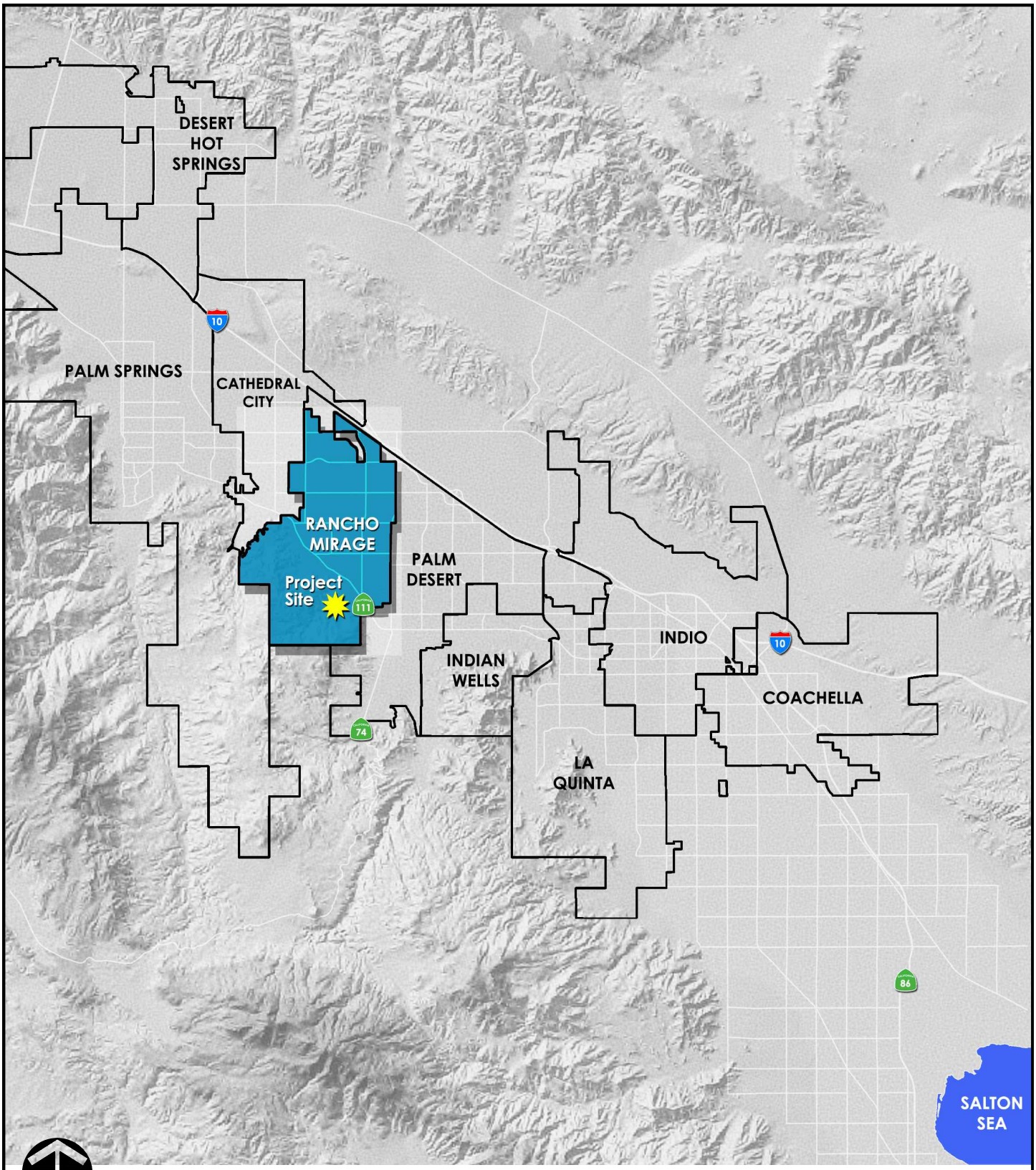
Further, the site location can be described as being a Portion of Sections 13 and 14, Township 5 South, Range 5 East, San Bernardino Base Line and Meridian. The project site consists of the following Assessor Parcel Numbers: 684-270-033, -036, -043, and -044.

## 3.3 Surrounding Land Uses

The existing land uses surrounding the project site are displayed in the following table:

**Table 3.1 Surrounding Land Uses**

| Location | General Plan / Zoning | Exiting Use |
|---|---|---|
| North | MR, OS/W | West Magnesia Storm Channel, Mountain Reserve Hillside |
| South | MR | Mountain Reserve Hillside |
| East | P, R-M | Rancho Mirage Elementary School, Magnesia Falls Cove Neighborhood |
| West | MR | Mountain Reserve Hillside |

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# REGIONAL LOCATION MAP

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*3.1*

## 3.4 Porcupine Creek History

The Porcupine Creek property was initially entitled and constructed in 1997 as a residential estate compound with various amenities. Since 2011, the property has been remodeled and upgraded to its existing. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, a fitness center, a gate house, and new villas, with an additional approximate 15,000 square feet planned for construction in the next few months pursuant to the existing entitlements for the residential estate. In addition to the construction of on-site buildings and recreational facilities, the landscaping and irrigation at the property has also been rehabilitated and remodeled. Porcupine Creek ownership encompasses 230-acres, but only 191-acres of that is proposed for inclusion in the Porcupine Creek Retreat Specific Plan.

### Existing Conditions

The Porcupine Creek Estate includes a main residence and adjacent casitas totaling approximately 25,000 square feet, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and shade structures. Currently, the total building area on the estate is approximately 66,500 square feet. In addition, the owner intends to add two additional villas and a fitness pavilion to the private estate in the next several months, as permitted under the existing entitlements, and these improvements, with related utility improvements, will add approximately 15,000 square feet of additional improvements. Although these additional improvements are being constructed separate and apart from the proposed Retreat project, and have independent utility to the private estate, these improvements are being considered in this EIR because the improvements were not completed when the NOP was issued, and therefore, cannot properly be considered part of the project baseline. The estate grounds also accommodate various private recreational amenities, clubhouse building, and a tennis pavilion overlooking three tennis courts. In proximity to the main residence is an elaborate pool and spa area with private spa treatment rooms, a fitness center, and poolside bar. Primary access for guests is located via a manned gatehouse at the Dunes View entry gate. Staff and delivery access is located at Mirage Road which is also gated and manned. **Exhibit 3.2, *Existing Site Conditions***, displays an aerial image of the project site's current condition.




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# EXISTING SITE CONDITIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
3.2

# 3.5 Proposed Porcupine Creek Retreat Specific Plan

## Project Objectives

The Porcupine Creek Retreat Specific Plan project has evaluated various design features of the project including engineering feasibility, water efficiency, General Plan goals, and compatibility with surrounding land uses during the planning process. In order to ensure the functional integrity, economic viability, environmental sensitivity, and positive aesthetic contribution of the Specific Plan, the following project objectives were established:

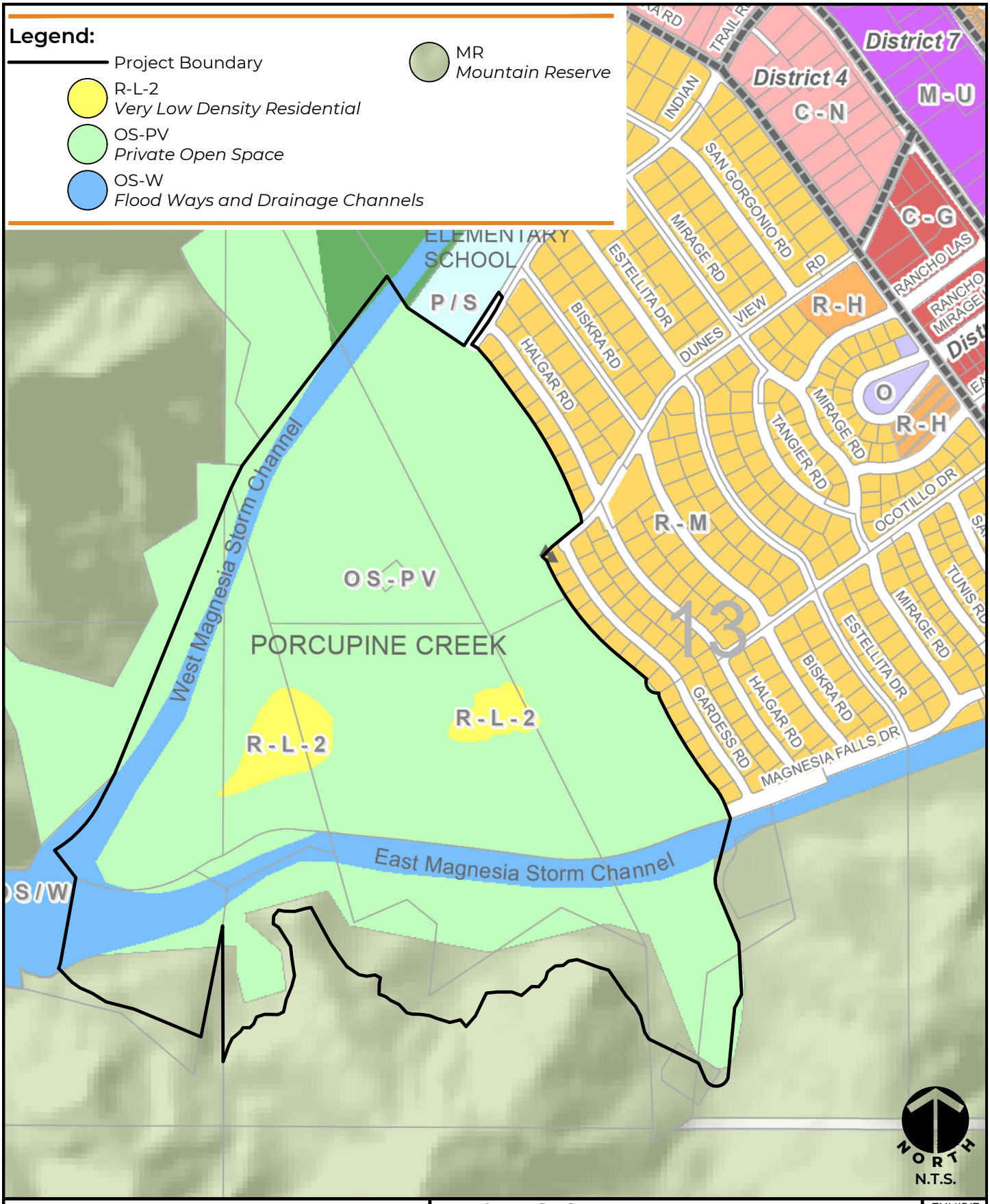
- Provide a comprehensive land use plan that establishes development standards, land use regulations, and programs to guide the orderly transition/development of the property.
- Promote quality development consistent with the goals and policies of the Rancho Mirage General Plan.
- Repurpose Porcupine Creek as an exclusive, world-class Retreat.
- Rezone the property to permit a Retreat capable of generating Transit Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage.
- Maintain flexibility to respond to market conditions and evolving design needs.
- Ensure the high standards outlined in the development plan are maintained by adoption of a Development Agreement.

## Project Characteristics

The approximately 191-acre Porcupine Creek Retreat Specific Plan project ("project") is proposing to develop a retreat within the boundaries of the 230-acre Porcupine Creek private estate, in the City of Rancho Mirage. The project proposes to reposition Porcupine Creek as an exclusive retreat with a total of up to 50 studio, single-bedroom, and multi-bedroom units ("keys"). Proposed upgrades would incorporate a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. The rerouting of the golf course intends to maintain the existing fairways with some minor adjustments, all located within the previously improved golf course area. These additions could expand the total building area on the estate from approximately 66,500 square feet to approximately 250,000 square feet. Consistent with existing practices, the proposed, upgraded dining, golf, and spa facilities will be available to retreat guests only.

### Land Uses

**Exhibit 3.3, *Existing General Plan and Zoning Designations***, illustrates the existing land use and zoning designations of the Porcupine Creek property.

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# EXISTING GENERAL PLAN & ZONING DESIGNATIONS

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EXHIBIT
3.3

### *Existing Land Use*

The land use designations currently in effect for Porcupine Creek Retreat Specific Plan property consist of Very Low Density Residential (R-L-2), Private Open Space (OS/PV), Floodways and Drainage Channels (OS/W), and Mountain Reserve (MR), as established by the City of Rancho Mirage. The City's General Plan and Zoning Map of the City diagrammatically shows Low Density Residential designated in the areas where the buildings currently exist, and Private Open Space for the golf course portions of the property. The Floodways and Drainage Channels designation is located along the existing stormwater channels located along the western property boundary (West Magnesia Storm Channel), and through the southern portion of the property (East Magnesia Storm Channel). Areas designated by the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP) as Conservation Area/Measure V Mountainous Lands lie outside of and are excluded from the Specific Plan. Development will not take place on any portion of Measure V classified lands. This is displayed in **Exhibit 3.3, *Existing General Plan and Zoning Designations***.

### *Proposed Land Use*

As a part of the entitlement process, discussed further in following subsections, the project will submit a General Plan Zoning Map Amendment The General Plan Zoning Map Amendment will amend the existing land use designations to "Specific Plan" with an underlaying zoning designation of "Resort Hotel". The Resort Hotel and Specific Plan land uses, as defined by the City of Rancho Mirage, are defined as follows:

#### *Resort Hotel*

The Resort Hotel designation (Rs-H) allows for the development of hotels and destination resorts with limited, ancillary commercial uses, such as spas, recreational facilities, restaurants, lounges, and small retail shops that directly support the primary use. Rs-H land uses allows a lot coverage of 0.25.

The Rs-H underlaying designation will allow uses compatible with Resort Hotel land use designations in the Specific Plan area.

#### *Specific Plan*

The Specific Plan designation is used in conjunction with other underlying land use designation and requires the development of a specific plan. It is also appropriate as a means of processing large-scale community commercial and mixed-use development proposals. Specific plans provide detailed plans, concepts, and designs of large-scale complex projects indicating the distribution, location, and intensity of proposed land uses. They also identify the required level and availability of public facilities and services as well as the economic viability of proposed developments. The proposed land use and zoning designations are illustrated in **Exhibit 3.4, *Conceptual Land Use Plan***. The Porcupine Creek Retreat Specific Plan proposes two basic land uses within the SP area, including Estate/Retreat, and Flood Control Channel. Areas designated Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Conservation Area/Measure V Mountainous Lands lie outside of and are excluded from the Specific Plan. The proposed land uses are described as follows:

Estate/Retreat

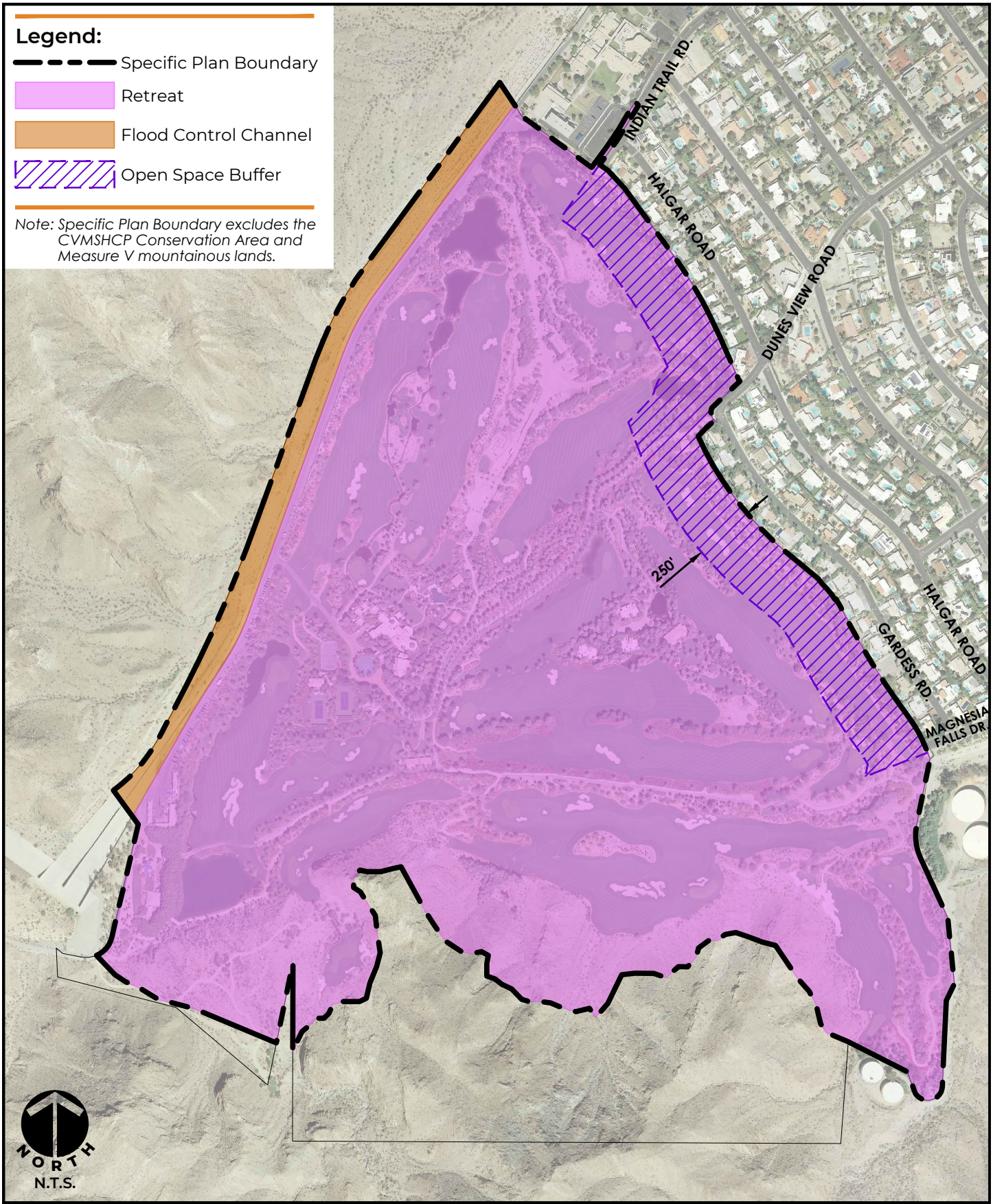
The Retreat use will encompass approximately 191-acres and covers the existing estate compound as well as necessary enhancements for buildout of the Retreat. The footprint of this area is currently fully developed with manmade improvements such as buildings, driveways, parking areas, golf course fairways, recreational facilities, pools, pathways, utilities, as well as other supporting site, building, and landscape improvements. Retreat enhancements will be designed and integrated in a manner compatible with the existing estate compound and within the existing development footprint.

**Table 3.2 Porcupine Creek Retreat Specific Plan Land Use Plan Summary**

| Land Use | Area | Key Count |
|---|---|---|
| Retreat and Villas | 180,000 sf | 50 |
| Temporary, Accessory, and Shade Structures | 70,000 sf | -- |
| **Total** | **250,000 sf** | **50** |

Flood Control Channel

This 7.7-acre area contains facilities associated with CVWD flood control channels including a concrete flood channel, fencing, access road, and storage/maintenance buildings. The flood channel and maintenance road serve as a physical barrier between the Retreat and the natural desert/hillside areas to the northwest. The site, which is currently developed, is protected by this improvement, which were designed and constructed through prior approvals. See **Section 4.9, *Hydrology and Water Quality*** for further discussion.

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# CONCEPTUAL LAND USE PLAN

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

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3.4

## Circulation

Vehicular and pedestrian circulation systems are an important component of every development project. Vehicular access occurs at a primary gated entry at the center of the site's eastern boundary and a secondary gated service entry at the northern property corner. A third access point off Magnesia Falls Drive provides emergency service and maintenance access at the southern corner. An existing network of private driveways serves the various buildings on site. These roads also accommodate safe pedestrian and golf cart movement within the project. The project will be ADA-compliant.

**Exhibit 3.5, *Conceptual Circulation Plan***, illustrates the existing and proposed circulation of the Porcupine Creek Retreat Specific Plan.

### *Entries*

Primary vehicular access to the site is taken from a manned, gated entry at Dunes View Road situated at the center of the estate's northern boundary. The existing entry is intended for use by the owner and guests and is enhanced with decorative concrete pavers, entry gates, a guard house, and landscaped areas. Staff and deliveries arrive at a manned/gated secondary entrance off Mirage Road at the northern corner of the site. Additionally, a third access point at the terminus of Magnesia Falls Drive currently provides maintenance, construction, special purpose, and emergency service access to the site.

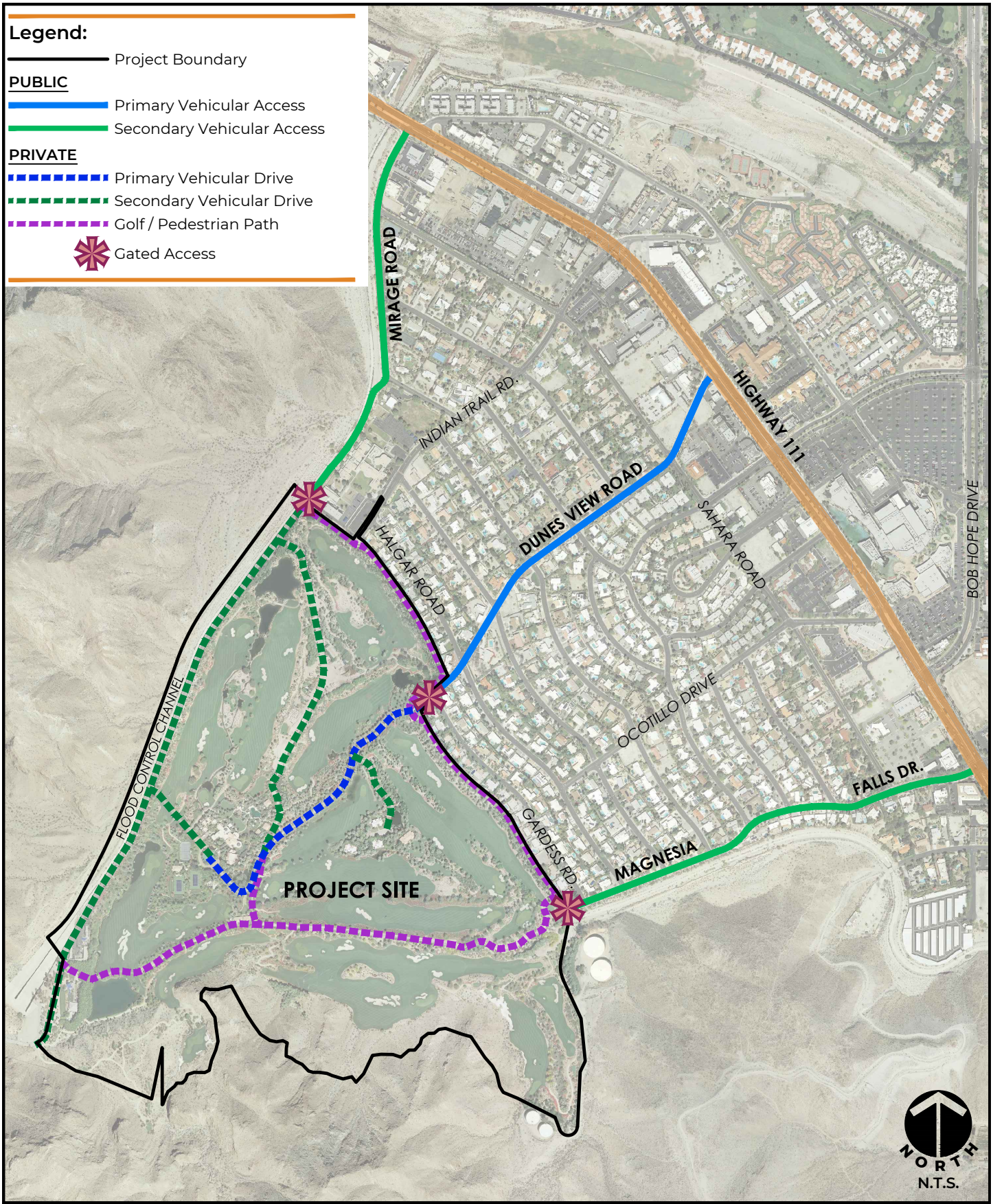
### *Vehicular Circulation*

The vehicular circulation system consists of an interior network of private driveways with a central spine road leading from the primary entry on Dunes View Road to the Estate's primary residence. The private interior road system is intended to be adjusted and extended as needed to accommodate new construction and onsite expansions. These road sections depict visuals and widths for the Primary Vehicular Drive (24'), Secondary Vehicular Drive (20'), and Golf/Pedestrian Paths (10').

Project guests will arrive via vehicle at the main entrance. Private vehicles will be collected by a valet on arrival. Guests will then be shuttled to and from accommodations via golf cart. Parking will be provided (within the gated property) along the access road (Entrance at Mirage Road), and along the Magnesia North flood channel frontage road for staff, ground, and maintenance employees as well as guest vehicles.

### *Pedestrian Circulation*

Pedestrian circulation is provided within the project's low-speed, low-volume private streets and golf cart paths as is common in desert resorts.

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# CONCEPTUAL CIRCULATION PLAN

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
3.5

## Open Space and Recreation

Porcupine Creek provides guests with convenient access to a variety of open space and recreational amenities without leaving the property. This Specific Plan proposes to build upon existing open space and recreational amenities to include (but not limited to):

- Golf course and driving range
- Tennis courts
- Hiking trails
- Fitness and garden trails
- Swimming pools/spas
- Multi-purpose sport courts and fields
- Other potential retreat and low-intensity recreational uses within the existing open space areas of the property.

### *Open Space Buffer*

The project will maintain the established buffer conditions which include golf and an open space buffer of 250 feet along the northeasterly boundary of the project site. The buffer will provide separation and a park-like appearance between the retreat uses and existing neighboring residences. No new habitable buildings will be constructed within the buffer area, only minor reception, maintenance, and accessory structures related to golf and other retreat uses would be allowed.

## Signage

The extensive use of signage at Porcupine Creek is not anticipated. Any on-site directional signage will be limited and discrete. Signage that is not visible outside the property will be subject to administrative approval by the Director of Development Services. Signage that is visible from outside the project will be subject to review according to the provisions of Section 17.28.040 of the Rancho Mirage Municipal Code (RMMC) or as provided in the Development Agreement.

## Architectural Guidelines

The overall architectural aesthetic of the retreat is modern, minimalist detailing using traditional, Mediterranean-inspired materials to portray a serene, upscale retreat environment complementary of the surrounding local desert.

### *Materials*

The retreat will incorporate natural materials and textures, subdued colors, and characteristic architectural elements. Large expanses of glazed doors will maximize natural light exposure and encourage interaction with the outdoors. Entry overhangs of varying scales will work to inform visitors

of public vs. private spaces as well as offering relief from the sun and adding interest to building façades.

### *Roofs*

- Hipped roofs clad in clay Spanish tile nod to the traditional Mediterranean style materials used throughout the property.
- Back-Of-House buildings, hidden from public and guest view, may make use of alternate roofs including flat roofs or standing seam metal roofs in colors complementing the property.

### *Doors and Windows*

- Large spans of windows and glazed doors will create a visual and physical connection between the interior and exterior of the building and facilitate natural lighting of interior spaces.
- Architectural features such as overhangs, covered entryways, and trellises will enhance the façades and demarcate entrances as well as provide shade and reduce daytime heat gain.

### *Design Features*

- Articulation in the façades using wall step backs and roof overhangs adds visual interest and variation to the differently programmed buildings.
- Architectural emphasis on spaces of outdoor amenities, such as wooden decks and trellises, help to blur the line between natural environment and built structures.
- The use of plant covered columns and trellises further joins the landscaping with the built environment.

### *Color*

- Materials and accessory structures used along the approach of the buildings will maintain a common, consistent architectural style within the retreat complex.
- Changes in material will be applied purposefully and, in a manner, corresponding to variations in the building mass and use.
- A balanced relationship between “hard” materials like stone cladding and clay tile and “soft” materials like glazing and plant-adorned wood, all in subdued, natural desert tones will create a palette characteristic to the retreat complex.

## Infrastructure and Utilities

### Water and Sewer

The Specific Plan area is provided with domestic water and sanitary sewer service by the Coachella Valley Water District (CVWD). Existing infrastructure includes a network of private water and sewer lines which ultimately connect to public CVWD facilities.

### *Domestic Water*

As shown in Exhibit 3.6, *Conceptual Water Plan*, the project proposes to augment the existing private network of water lines within the project boundary to accommodate new construction. The existing connection to the CVWD public water system on Dunes View Road will remain in place. Golf and open space areas are currently irrigated using groundwater from an off-site well located adjacent to the Whitewater channel.

### *Sanitary Sewer*

As shown in Exhibit 3.7, *Conceptual Sewer Plan*, the project proposes to augment the private network of sewer lines to accommodate new construction. This upgraded interior system will continue to use the existing sewer connection on Dunes View Road in addition to constructing two additional sewer connections..

## Solid Waste

Burrtec Waste Industries, Inc. (Burrtec) currently provides solid waste collection services to the project property, and the City of Rancho Mirage. Burrtec services include waste removal, recycling, and green waste disposal. The pick-up services provided by Burrtec include residential, commercial, roll-off services, construction and demolition, portable restrooms, special events, temporary bin rental, and concrete washout services. Burrtec's residential services include bulky item pick-up, electronic waste, Christmas tree recycling, household hazardous waste and used motor oil. Burrtec will continue to serve the project property.




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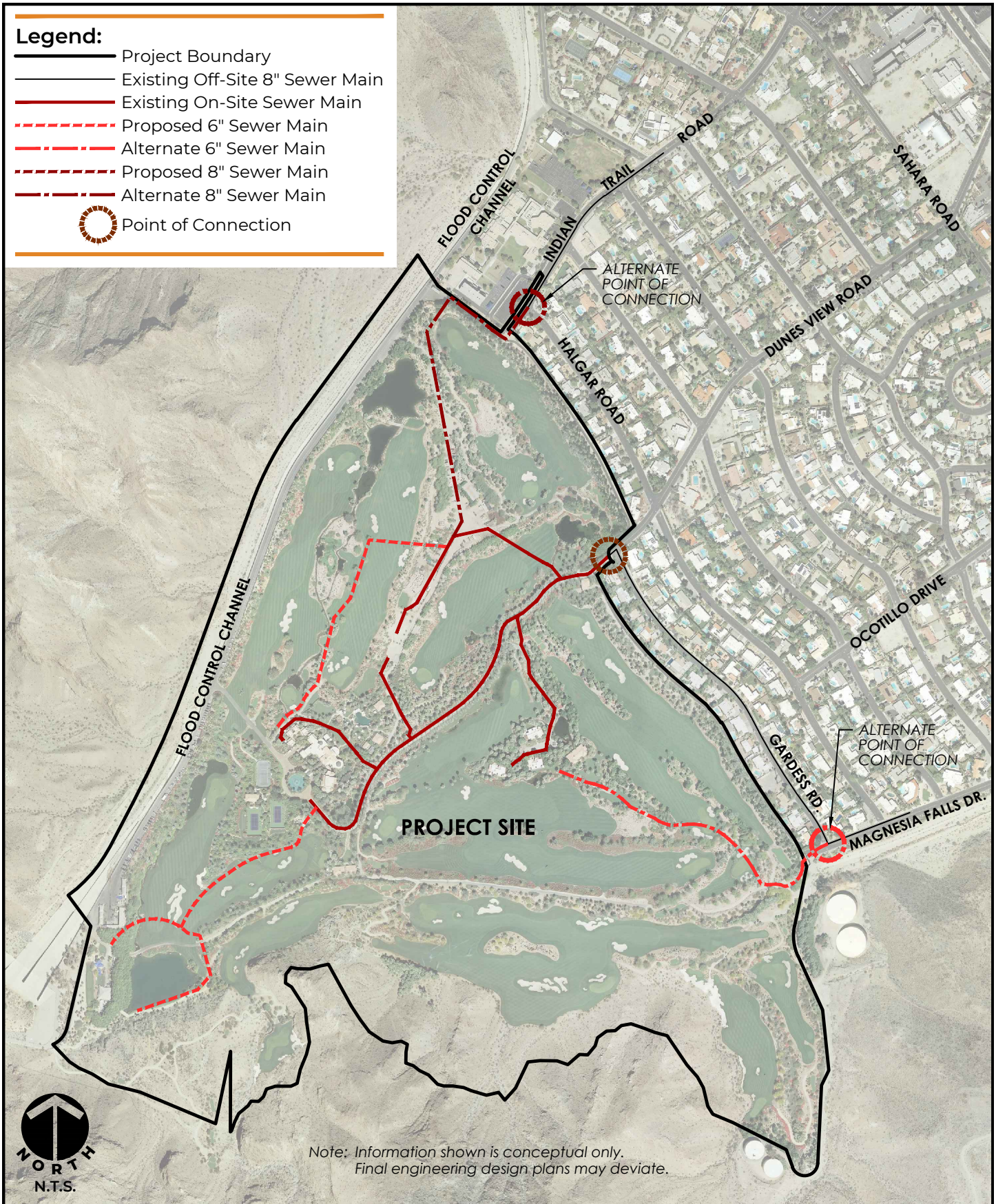
# CONCEPTUAL DOMESTIC WATER PLAN

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT 3.6

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# CONCEPTUAL SEWER PLAN

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT 3.7

## Dry Utilities

### *Electric*

Electricity is currently provided to the project property by SCE. Electricity is transmitted to Rancho Mirage primarily through high-voltage lines and step-down transformers at the Devers substation near Desert Hot Springs and substations located throughout Rancho Mirage. Currently, there is no power generation in the City itself. SCE facilities include 12 kV transmission lines for local distribution. High voltage lines for more distant transmission rang up to 115 kV and 230 kV. Substations step down voltage for local distribution and use. Three substations serve Rancho Mirage: one on Highway 111, just east of Thunderbird Cove, one on Clancy Lane at Monterey Avenue, and one on Plumley Road south of 35th Avenue.

The existing power infrastructure on the property consists of a high voltage line that goes from the main utility connection to an onsite transformer yard (or substation) by the tennis pavilion. The improvements to the private estate planned for 2020 include an upgrade and expansion to the on-site electrical distribution system to better serve the property, including installation of an electrical substation near the maintenance area in the northern portion of the project property. The substation will be a slab with surrounding walls, with a footprint of approximately 33 feet by 70 feet (subject to change).

In order to comply with new Title 24 requirements regarding the use of solar power and battery backup, the substation plans to include Tesla Megapack batteries, and potentially, a shade structure with solar panels. The substation yard and associated equipment will be sized to support the future expansion of electrical and battery backup infrastructure to serve the proposed future buildout.

### *Natural Gas*

Southern California Gas Company (“SoCalGas”, or “The Gas Company”) currently provides natural gas to the project property. SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas has 21.4 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the city of Visalia to the US-Mexico border.

High-pressure distribution lines are located approximately 0.50 miles northeast of the project site along Highway 111. The developed Porcupine Creek property is currently supplied with natural gas utilities. Natural gas is provided to the project property from a connection at Dunes View Road

## Grading

Grading of the proposed project will maintain the existing site elevations. Proposed grading will result in the creation of building pads for the construction of additional structures such as casitas and villas. The proposed grading will result in ground elevations which are similar to existing grades. These

grades are subject to final engineering and actual field conditions that may result in adjustments to pad and street grades subject to plan check approval by the City. No grading is proposed within the open space buffer area other than what is necessary to adjust retention areas and minor reception, maintenance, golf and accessory structures.

Grading is also designed to achieve positive surface flows and protect all structures and physical improvements from the 100-year storm, surface runoff, soil erosion and sedimentation both during and after construction. In addition, the grading design seeks to balance on-site earthwork (cut and fill) taking into account excavation generated by site grading and grades needed to achieve minimum cover for underground gravity sewer.

Grading activities will follow regulations set forth by the National Pollutant Discharge Elimination System (NPDES) to control sediment discharge during construction.

### Drainage

The drainage concept is intended to utilize and augment existing drainage features and infrastructure. A series of lakes, low points, and retention areas throughout the project site are designed to capture surface runoff from the 100-year storm. The site generally drains south to north and south to east. Drainage design is conceptual and subject to final engineering and actual field conditions that may result in adjustments subject to plan check approval by the City.

## Public Services

### Fire Services

The City is provided with a full range of fire protection services are offered by RCFD in cooperation with Cal-Fire, 24 hours a day 7 days a week. The City entered into a cooperative agreement with the County of Riverside, through its Cooperative Fire Programs Fire Protection Reimbursement Agreement. This agreement ensures the city is provided with an array of full services from fire protection to hazardous materials discharge and medical emergencies. RCFD partners with 21 cities for contract services, which include most of the Coachella Valley. The fire department operates under a Regional Fire Protection Program, which allows all their fire stations to provide support as needed regardless of jurisdictional boundaries. The City's Fire Department is made up of 27 sworn, 2 full time non-sworn and 1 part time non-sworn personnel.

The following fire stations are located within the City limits:

- Rancho Mirage Station No. 50 is located at 70-801 Highway 111 and is responsible for covering the southern portion of Rancho Mirage and is equipped with one medic engine (fire truck) and paramedic ambulance. The station is staffed with five firefighters daily, and three of the five firefighters are paramedics.

- Rancho Mirage Station No. 69 is located at 71-751 Gerald Ford Drive and is responsible for covering the northern portion of Rancho Mirage. Equipment at this station consists of one medic engine and one medic unit. The station is also staffed with five firefighters daily, and three of the five firefighters are paramedics.

### Police Services

Law enforcement services are provided to the City of Rancho Mirage through a contractual agreement with Riverside County Sheriff's Department. The Sheriff's Department provides 24-hour municipal police services associated with a City police department and serves over 18,000 residents over 25 square miles. In 2019, they responded to over 18,454 calls for service. The Sheriff's Department has a small police substation at the Rancho Mirage Public Library; deputies assigned to work in Rancho Mirage primarily operate out of the Palm Desert station located at 73-705 Gerald Ford Drive. The Sheriff's Department provides emergency and non-emergency responses, police patrol and traffic enforcement.

### School Services

The City of Rancho Mirage is served by two public school districts: the Palm Springs Unified School District (PSUSD), which serves the majority of Rancho Mirage, and the Desert Sands Unified School District (DSUSD), which serves the portion of Rancho Mirage that lies south of Frank Sinatra Drive and east of Bob Hope Drive.

The closest school to the project site is Rancho Mirage Elementary School, located at 42985 Indian Trail, north of the property's boundary.

### Library Services

The Rancho Mirage Public Library, located at 71100 Highway 111, opened in 2006 and is just over 45,000 square feet, and includes outdoor program areas, and audiovisual services area, and a 350-seat auditorium for programs and events.

Eisenhower Medical Center has a medical library, but lending to non-hospital staff is prohibited. College of the Desert also has an on-campus library that is open to the public and affiliated with the Riverside County library system.

## Development Regulations

The establishment of site-specific development standards set forth in the Porcupine Creek Retreat Specific Plan are intended to guide orderly development within the Specific Plan area, while also maintaining some flexibility to respond to changing conditions which may factor in any long-term development.

**Table 3.3 Development Standards, Allowable Uses**

| ***Allowable Uses***[1] | |
|---|---|
| Retreat<br><br>Including but not limited to the following uses:<br>• Hotel facilities<br>• Guest rooms<br>• Villas and casitas<br>• Estate residence<br>• Health and fitness facilities, indoor and outdoor<br>• Spa services<br>• Restaurants, lounges, and catered food service including remote pop-up service; indoor and outdoor<br>• Meeting facilities<br>• Entertainment activities for retreat guests<br>• Recreational uses and open space | Permitted |
| Maintenance and back of house facilities | Permitted |
| Solar fields and related facilities | Permitted |
| Parking including covered and enclosed | Permitted |
| Accessory structures including entry features, gatehouses, covered patios, decks, gazebos, sculptures, landscape/garden structures, greenhouses | Permitted |

1. Allowable uses are to be in conformance with project Development Agreement and implementing Development Plan Permit(s).

**Table 3.4 Development Standards**

| | |
|---|---|
| ***Lot Size*** | |
| Total Lot Area | 191 Acres |
| Minimum Lot Area | None |
| Minimum Lot Width | None |
| Minimum Lot Depth | None |
| ***Building Setbacks*** [1] | |
| Minimum Setback to Residential | 50 Feet |
| Minimum Setback to Public/School | 50 Feet |
| Minimum Setback to all other Project Boundaries | 50 Feet |
| ***Other*** | |
| Max. Structure Height in 250' Buffer | 20 Feet/1 Story |
| Max. Structure Height outside of 250' Buffer [2] (Including Sculptures and Landscape Structures) | 50 Feet/2 Story |
| Building Coverage | Maximum 250,000 sf. |
| Distance Between Structures | 15 Feet |
| Off-Street Parking Spaces [3] | 1.5 Spaces per key |

1. No new guest facilities or multi-story buildings would be located within the 250-foot buffer separating the retreat from existing residences.
2. Setbacks do not apply to gatehouses or utility structures (such as the existing SCE building that contains switchgear and transformers at the southern terminus of Magnesia Falls Drive); any new, non-habitable, utility structures in the buffer area shall be located at least 10' from any residential property line, and shall conform to the RMMC noise restrictions to avoid disruption to the quality of life of existing neighboring residents.
3. The number of required parking spaces may be reduced administratively by the Development Services Director if operational history or traffic study shows a decrease in observable demand for parking.

## 3.6 Implementation and Entitlements

The Porcupine Creek Retreat Specific Plan establishes the general intent and comprehensive framework for the future expansion of Porcupine Creek. However, prior to construction, various implementing actions and approvals are required and include:

### *Specific Plan (SP)*

The Specific Plan will cover the approximately 191-acre site to provide a comprehensive development guidelines, allowable uses, and development standards. Areas designated Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP) Conservation Area/Measure V Mountainous Lands lie outside of and is excluded from the Specific Plan. The SP requires public hearings before the Planning Commission and the City Council.

### *Development Agreement (DA)*

The Specific Plan will be accompanied by a Development Agreement that establishes special terms beneficial and mutually agreeable to both the City and the property owner to facilitate project development and to vest the project approvals. The DA requires public hearings before the Planning Commission and the City Council.

### *General Plan Zoning Map Amendment*

The General Plan Zoning Map Amendment will amend the General Plan land use designation and zoning from "Very Low Density Residential (R-L-2)" and "Private Open Space (OS/PV)" to "Specific Plan" with an underlying zoning designation of Resort Hotel (Rs-H). The General Plan Zoning Map Amendment also requires public hearings before the Planning Commission and the City Council.

### *Preliminary Development Plans (PDP)*

It is expected that one or more Preliminary Development Plans (PDP) will be submitted, potentially in phases, up to the total buildout allowed by the Specific Plan. Each PDP that is approved by the City Council may be implemented by submitting incremental Final Development Plans (FDP) for Staff approval.

### *Lot Line Adjustment (LLA)*

The Lot Line Adjustment will adjust existing parcel lines to create a single legal parcel for the Specific Plan property and separate legal parcels for the CVMSHCP Conservation Area/Measure V Mountainous Lands located outside the Specific Plan and excluded from the project entitlements specified above.

## 3.7 Intended Uses of This EIR

This Draft EIR examines the environmental impacts of the Porcupine Creek Retreat Specific Plan and identifies feasible measures to mitigate such impacts to the maximum extent reasonable. The Draft EIR allows the City of Rancho Mirage, other responsible agencies, and interested parties to evaluate the proposed project and make informed decisions with respect to the requested entitlements.

The CEQA Guidelines require an EIR to include a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR in their decision making and the list of the permits and other approvals required for project implementation.

The City of Rancho Mirage will use this Draft EIR to provide information on the potential environmental effects of the following proposed actions:

- Adoption of the Porcupine Creek Retreat Specific Plan;

- Approval of the General Plan Zoning Map Amendment to change the "Very Low Density Residential (R-L-2)" and "Private Open Space (OS/PV)" to "Specific Plan" with and underlaying zoning designation of "Resort Hotel (Rs-H)";
- Approval of a Development Agreement;
- Approval of Development Plan Permit and Preliminary Development Plan; and
- Approval of the Lot Line Adjustment.

## 3.8 Responsible Agencies

Section 15124 (d) of the State CEQA Guidelines requires that the Project Description in an EIR include a list of permits and other approvals required to implement a proposed project, the agencies expected to use the EIR in their decision making, and related environmental review and consultation requirements. The following are anticipated responsible agencies which may rely on this Draft EIR for their discretionary approvals required to implement the project:

### *California Public Utilities Commission / SCE*

Approval or certification related to any other applicable general order, rule, or regulation concerning utility modification, conveyance, or delivery.

### *Coachella Valley Water District*

Review and approval of the design and plans for the project's domestic water and wastewater systems.

### *Colorado Regional Water Quality Control Board (Region 7)*

Approval may include but are not limited to: (1) General Construction Stormwater Permit; (2) Standard Urban Stormwater Mitigation Plan; and (3) Submittal of a Recycled Water Report for the use of recycled water as a dust control measure for construction. Additionally, approval of a Water Quality Certification under Section 401 of the Clean Water Act may be required.

# Chapter 4.0 Environmental Impact Analysis

## 4.1 Introduction

This Draft EIR for the Porcupine Creek Retreat Specific Plan provides analysis of impacts for all environmental resource categories under CEQA. Sections 4.1 through 4.16 discuss the environmental impacts that may result with implementation of the Specific Plan.

## 4.2 Resource Categories Addressed in the EIR

The following environmental resource categories are addressed in this chapter:

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Energy
4.6 Geology and Soils
4.7 Greenhouse Gas Emissions
4.8 Hazards and Hazardous Materials
4.9 Hydrology and Water Quality
4.10 Land Use and Planning
4.11 Noise
4.12 Public Services
4.13 Transportation
4.14 Tribal Cultural Resources
4.15 Utilities
4.16 Wildfire

## 4.3 Format of the EIR

Each section of this chapter is formatted with the following headings

- Introduction
- Existing Conditions
- Regulatory Setting
- Project Impact Analysis, including Thresholds of Significance
- Cumulative Impacts
- Mitigation Measures
- Level of Significance After Mitigation
- Resources

### Introduction

This section includes a brief introduction of the environmental impact to be analyzed within the section as it pertains to the project and identifies sources used to evaluate the potential environmental effects.

## Existing Conditions

This section contains a discussion of the existing conditions, services and physical environment of the project site and vicinity.

## Regulatory Setting

This section includes the local, state and federal regulatory framework utilized during the analysis.

## Project Impact Analysis

### *Thresholds of Significance*

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA Guidelines Section 15091, which requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences associated with implementation of the project.

The level of significance for each impact examined in the EIR was determined by considering the predicted magnitude of the impact against applicable significance criteria. Thresholds were developed using criteria from the CEQA Guidelines; State, federal, and local regulatory guidance; local/regional plans and ordinances; accepted practices; consultation with recognized experts; and other professional opinions.

The following adjectives are used specifically to define the degree of impact used in the Impact Analysis and Mitigation.

An "**adverse**" impact is any negative environmental result of the project, however small. As a disclosure document, the finding of an impact as "adverse" merely indicates that the project will cause an impact to occur compared to existing conditions, even though that impact may be less than significant. For example, the removal of vegetation from a vacant site might be considered adverse (i.e., "negative") but it may not exceed a local threshold such as loss of native plants or plant communities. Therefore, an impact may be adverse without being significant.

A "**significant**" impact is considered a substantial negative effect that exceeds a critical and accepted threshold for significant adverse environmental effects. CEQA defines a significant effect on the environment as "*a substantial or potentially substantial, adverse (i.e., negative) change in any of the physical conditions within the area by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance…* (CEQA Guidelines, Section 15383). As recommended in the CEQA Guidelines, impacts are also identified as "**potentially significant**" prior to mitigation, which is the standard for determining which potential impacts are studied in the EIR.

### *Methodology*

This section discusses the methodology used during the technical analysis where necessary.

### *Project Impact*

The environmental impact analyses conducted for each environmental topic were undertaken pursuant to the following CEQA Guidelines sections:

- Section 15126, *Consideration and Discussion of Environmental Impacts;*
- Section 15126.2, *Consideration and Discussion of Significant Environmental Impacts;* and

Each environmental impact discussion assesses project specific environmental effects of the proposed project.

The results of the impact analyses discussed under each environmental topic were evaluated for significance relative to thresholds of significance identified at the beginning of each environmental impact discussion. The thresholds of significance presented are taken from Appendix G, *Environmental Checklist Form*, of the CEQA Guidelines, and where applicable, also includes quantified performance standards. Where relevant, each environmental impact discussion contains a separate discussion of potential cumulative effects under a bolded subheading.

## Cumulative Impacts

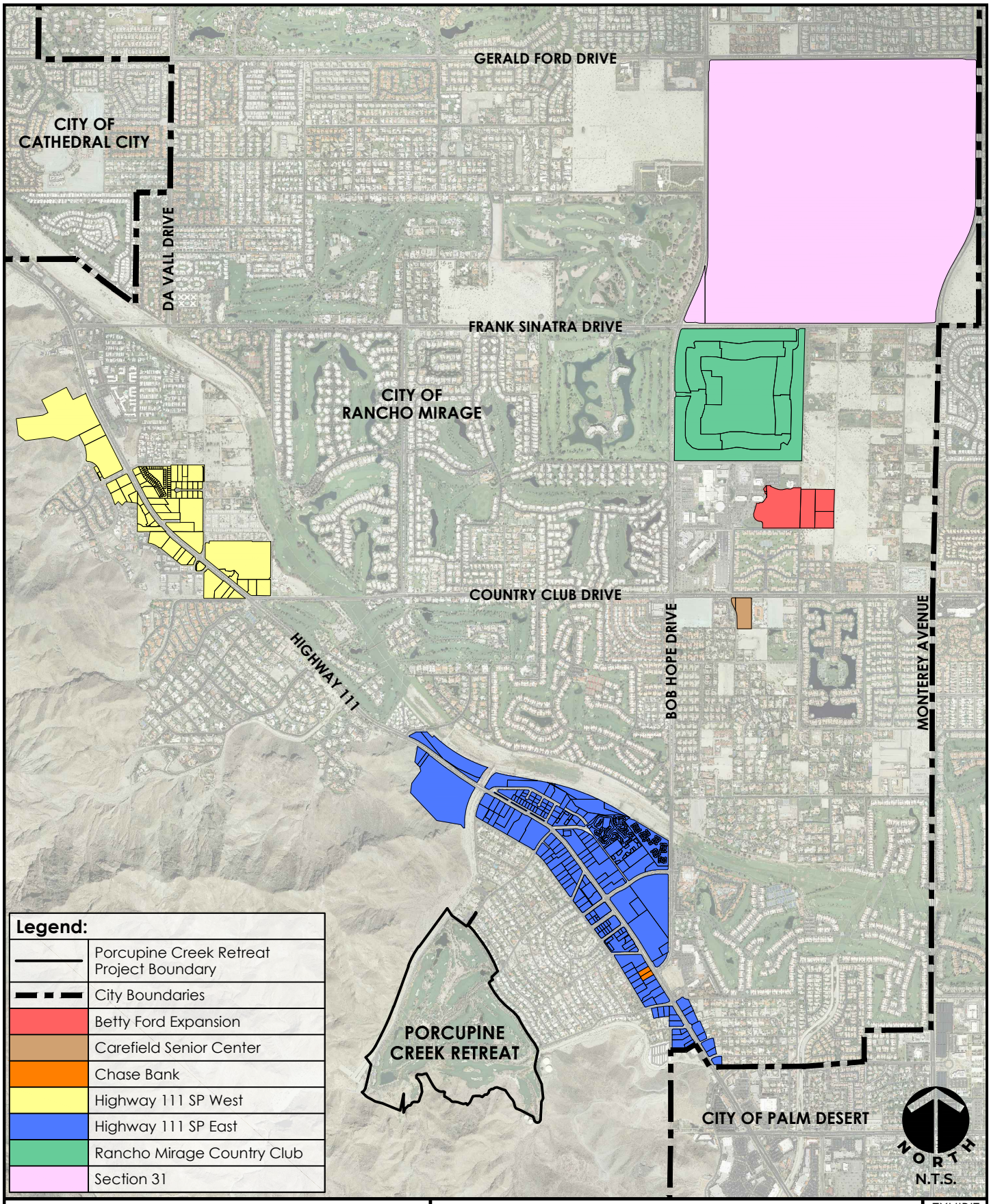
The basis for the cumulative impact analyses provided in this Draft EIR is consistent with Section 15130, *Discussion of Cumulative Impacts*, of the CEQA Guidelines. In particular, Section 15130 (b)(1)(A) as follows:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

For the proposed Porcupine Creek Retreat Specific Plan, the City provided a list of projects in the vicinity of Porcupine Creek producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency. **Exhibit 4.1, *Cumulative Project Locations***, identifies the location of these projects, and **Table 4.1, *Cumulative Project*s**, provides a short description of the projects.

**Table 4.1 Cumulative Projects**

| # | Project | Location | Distance | Description |
|---|---|---|---|---|
| 1 | Highway 111 Specific Plan | Approx. 4 miles along Highway 111, including areas north and south | 0.40 miles northeast | Highway 111, Specific Plan implementation will result in a variety of "destinations" that include high-quality retail, restaurants, hotels, offices, residential developments, and important cultural assets that have and continue to develop along the corridor. The plan coordinates various aspects of sustainability, infrastructure planning, infill development, and lot consolidation, where appropriate, and encompasses approximately 684 acres. |
| 2 | Chase Bank (Case No. PDP18005) | Northwest Corner of Bob Hope & Highway 111 | 0.45 miles east | A Preliminary Development Plan to develop a 3,470 square foot Chase Bank at the signalized intersection of Highway 111 and Bob Hope Drive. (Completed in April and is operational.) |
| 3 | Carefield Senior Living (Case No. PDP18004, DA180003, EA180002) | Southeast Corner of Country Club Dr. & John L Sinn | 1.50 miles northeast | A Preliminary Development Plan for 80,000-square-foot, two-story senior assisted living facility with 84 units and common amenities. |
| 4 | Rancho Mirage Country Club | Southeast Corner of Frank Sinatra Dr. and Bob Hope Dr. | 1.90 miles northeast | A Preliminary Development Plan proposing site and structural improvements associated with the hotel and residential project, including improvements to the new entry on Frank Sinatra and Bob Hope Drive. |
| 5 | Betty Ford Expansion (Case No. PDP19005, EIR19001) | 39000 Bob Hope Dr. | 2 miles northeast | The proposed changes to the HBFC campus include the removal of four residential buildings, to be replaced by two 2-story residential buildings, each approximately 30,935 square feet for a total of 61,870± square feet. The project also includes the construction of a new one-story, 22,748± square foot day-treatment building. |
| 6 | Section 31 | Northeast Corner of Bob Hope Dr. & Frank Sinatra Dr. | 2.40 miles northeast | A Specific Plan to implement the City's General Plan by regulating development of a mix of resort, residential, and supporting commercial uses on the approximately 618-acre site. |

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# CUMULATIVE PROJECT LOCATIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.1*

## Mitigation Measures

In some cases, following the impact discussion, reference is made to State and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited. Project-specific mitigation measures, beyond those contained in other documents, are offset with a summary heading and described using the format presented below:

**AES-1** Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact with which it is associated (AES-1 in this example).

## Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

## Resources

This section lists the resources used to write the section. The resources can also be found in **Chapter 8, *References***, of this EIR.

# 4.1 Aesthetics

## 4.1.1 Introduction

This section of the Porcupine Creek Retreat Specific Plan Draft Environmental Impact Report ("Draft EIR") describes the existing aesthetic character of the project site and surrounding area. This section also analyzes the potential impacts to the aesthetic quality of the site and surroundings and determines whether project implementation would result in significant impacts. Descriptions and analysis in this section are based on information contained in the *Porcupine Creek Retreat Specific Plan,* as well as other planning documents and aerial imagery of the project property and surrounding area. Sources used in the preparation of this section are identified in **Chapter 8, *References,*** at the end of this EIR.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with aesthetics at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to aesthetics in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Potential impacts involving substantial damage to scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway:*

- The purpose of the state Scenic Highway Program is to preserve and protect scenic state highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. State highways can be "officially designated" as Scenic Highways or be determined to be "eligible" for designation. The status of a state scenic highway changes from "eligible" to "officially designated" when a local jurisdiction adopts a scenic corridor protection program and the California Department of Transportation (Caltrans) approves the designation as a Scenic Highway. Based on the Caltrans Status Map of Scenic Highway Designations, State Route 62 and 74 are designated State Scenic Highways. Highway 111 is considered an Eligible state Scenic Highway but is not officially designated by Caltrans. Highway 111 is located approximately 0.50 miles northeast of the Porcupine Creek property, and the portions of the property proposed to be developed with retreat uses are not visible from Highway 111. Therefore, project implementation is not anticipated to result in substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. Less than significant impacts are anticipated.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.1.2 Existing Conditions

### Aesthetic Value and Quality

The perception and uniqueness of scenic vistas and visual character can vary according to location and composition of its surrounding context. The subjective values of views is generally affected by the presence and intensity of neighboring man-made improvements, such as structures, overhead utilities, and landscaping, often in relation to the aesthetic quality offered by a natural background that may include open space, mountain ranges, or a natural landmark feature. The proximity and massing of structures, landscaping and other visual barriers interact with the visibility of surrounding environments to restrict or enhance the value of local characteristic views. The evaluation of scenic vistas takes into consideration the physical compatibility of proposed projects in relation to land uses, transportation corridors, or other vantage points, where the enjoyment of unique vistas may exist, such as residential areas or scenic roads.

### Existing Conditions

The approximately 191-acre project currently lies within the 230-acre Porcupine Creek estate, which operates as a private residence and golf estate in the City of Rancho Mirage, California. The project boundaries are met by the Santa Rosa Mountains to the west and south, a developed medium density residential community to the east, and the Rancho Mirage Elementary School northeast of the project. The local surrounding area is characterized by both urban and developed uses and undeveloped mountain ranges.

The 191-acre Specific Plan area is currently developed with an existing main residence and adjacent casitas totaling in approximately 25,000 square feet, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and shade structures. Currently, the total building area on the estate is approximately 66,500 square feet. The estate grounds also accommodate various private recreational amenities including a 19-hole golf course, a tennis pavilion overlooking three tennis courts, a pool and spa area with private spa treatment rooms, a fitness center, restrooms, and poolside bar.

The Porcupine Creek property was initially entitled and constructed in 1997 as a residential compound. Since 2011, the property has been extensively remodeled and upgraded to its existing state. The current owner added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, tennis pavilion, fitness center, gate house, and two new villas. In addition, most of the landscape and irrigation have been improved.

In addition to the existing built structures, the owner intends to add two additional villas and a fitness pavilion to the private estate in the next several months, as permitted under the existing entitlements. These improvements, with related utility improvements, will add approximately 15,000 square feet of additional improvements.

Primary entry to the project property occurs at Dunes View Road, through a gated access point. This entry point is intended for the owner and guests and is enhanced with street pavers, entry gates, a guard house, and landscaped areas. Landscaping near the entry point is defined by tall hedges and trees that create a sense of privacy for the property. Secondary entry to the project property is located at the northern corner of the property, at Mirage Road. This secondary access point is also gated and is intended for staff use and deliveries. A third entry point is located at the southeastern entry point at the western terminus of Magnesia Falls Drive. This entry point is also gated and is for emergency access and special purpose use. The secondary access points are not currently designed with landscaped frontages.

As previously stated, the property's western and southern boundaries are met by the slopes of the Santa Rosa Mountains. The eastern property boundary is met by the rear of residential properties. An open space buffer along the eastern boundary of the project provides separation and a landscaped barrier between the existing residential homes and the existing structures in the project property. Due to the property's close proximity to the Santa Rosa Mountains, the site and the surrounding area has expansive views of the mountain. The private estate is currently characterized by its well-kept grounds and landscaping.

The City of Rancho Mirage prohibits the use of harsh, bright lights within the City since it can negatively impact the view of the night sky. Therefore, lower scale, accent, and back lighting is the preferred alternative to highlight key entry points, signage, intersections, and feature landscaping. This lighting can also have a dramatic effect during the desert evenings.

Lighting currently used at the Porcupine Creek property includes low intensity lighting typically found in gated residential communities. This includes wall mounted and downward-oriented fixtures at building entrances, and low intensity fixtures highlighting landscaped features along main driveways and building frontages.

## 4.1.3 Regulatory Setting

### State

#### *Caltrans State Scenic Highways*

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans achieves its mission of providing a safe, sustainable, integrated

and efficient transportation system to enhance California's economy and livability, by utilizing six primary programs within Caltrans. The six programs include Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration and the Equipment Service Center.

Caltrans manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations and citizens with the process to officially designate scenic highways.

The California Scenic Highway Program was created in 1963 to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The Streets and Highways Code, Sections 260 to 263 govern the Scenic Highway Program by establishing and applying standard for, and undertaking the development of, official scenic highways, the department shall take into consideration the concept of the "complete highway", which is a highway which incorporates not only safety, utility, and economy, but also beauty. In the development of official scenic highways, the department shall give special attention both to the impact of the highway on the landscape and to the highway's visual appearance.

It is further declared to be the intent of the legislature in designating such scenic highways to assign responsibility for the development of such scenic highways and for the establishment and application of specific planning and design standards and procedures appropriate thereto and to indicate, in broad statement terms, the location and extent of routes and areas requiring continuing and careful co-ordination of planning, design, construction, and regulation of land use and development, by state and local agencies as appropriate, to protect the social and economic values provided by the state's scenic resources.

According to the State Scenic Highway Program Route 62 and 74 are listed as state scenic highways in the Coachella Valley. Route Highway 111 from Bombay Beach in Salton Sea State Park to Route 195 near Mecca and from Route 74 (near Palm Desert) to Interstate 10 (near Whitewater) are both eligible scenic highways but are not "officially designated."

## Regional

### *Riverside County Ordinance No. 655, Regulating Light Pollution*

Riverside County's Ordinance No. 655 is intended to restrict the permitted use of certain light fixtures emitting into the night sky undesirable light rays which have a detrimental effect on astronomical observation and research. Per this ordinance, outdoor light fixtures means outdoor artificial illuminating devices, installed or portable, used for flood lighting, general illumination or advertisement. Such devices shall include, but are not limited to, search spot, and flood lights for:

- Buildings and structures,
- Recreational facilities,
- Parking lots,

- Landscape lighting,
- Outdoor advertising displays and other signs,
- Street lighting on private streets, and
- Walkway lighting

Rancho Mirage lies within Zone B of the Palomar restricted nighttime light zone and must comply with the County standards.

## Local

### *Rancho Mirage General Plan*

The Rancho Mirage General Plan (RMGP) was adopted by the City of Rancho Mirage in 2017 pursuant to California Government Code 65300 and its subsections. The RMGP addresses various elements relevant to the growth of the community including Land Use, Circulation, Housing, Conservation and Open Space, Air Quality, Community Design and more. General Plan elements specifically relevant to the aesthetic and visual character of the City are found in the Land Use, Conservation and Open Space, and Community Design Elements.

The Land Use Element identifies areas planned for residential, commercial and public uses, and provides the initial framework for the design aspects and allowed uses within the various planned areas. The Land Use Element ensures that conflicting uses are not located adjacent to each other, and outlines goals, policies, and programs within each land use category.

The Conservation and Open Space Element defines and establishes goals and policies toward preserving and effectively managing the natural resources within the City. Per the Conservation and Open Space Element, the Santa Rosa and San Jacinto Mountains National Monument retains biological, cultural, recreational, geological, educational, and scientific valuable. Additionally, the mountains provide magnificent vistas, wildlife, land forms, and natural and cultural resources, and thus, the Santa Rosa Mountains deserve long-term planning and protection including its valuable wildlife and scenic resources.

The purpose of the Community Design Element is to define the City's most important design goals and guide new development that enhances and distinguishes Rancho Mirage's identity. The element sets out the goals, policies and actions designed to improve the image, character, and quality of life in the City. The context of Rancho Mirage is defined by five features: physical setting, expansive views, scenic arterials, existing gated communities, and unique retail and commercial developments. These features shape the policies establishing community design. According to the General Plan, Rancho Mirage's identity is defined by the roadway system, the stark desert environment, and the backdrop of the mountains.

### *Scenic Roadways*

Since gated residential communities make up a majority of the City, most of the City is publicly viewed from the broad arterials and their parkways, according to the General Plan. The roads motorists and pedestrians travel on largely influence the City's community design. Therefore, community design features along these arterials require more coordinated landscape treatments, and an intensification of planting major intersections. Thus, creating an "oasis" effect as one travels from less dense, lower scale landscaping at the mid-block to enhanced, more intense landscaping at the intersections. The design plan for Rancho Mirage's arterials exist at three levels: boulevard, gateway, and special arterial streetscape plans, described as followed:

- Boulevard streetscape plan: reserved for the two most important arterials from the perspective of overall City identity: Bob Hope Drive and Highway 111. This designation envisions a formal landscape plan incorporating community-wide design themes.
- Gateway landscaping: reserved for major entry points into Rancho Mirage from Monterey Avenue and the northern stretch of Bob Hope Drive between Dinah Shore and Ramon Road.
- Special arterial landscaping: reserved for the east/west arterials and parts of Monterey Avenue and Da Vall Drive. This concept allows for more design flexibility where each roadway takes on a unique landscape theme reflecting surrounding land uses, such as the adjacent gated communities.

Exhibit 33, *Community Design Guidelines*, *Landscaping*, in the Community Design Element of the Rancho Mirage General Plan, displays the arterials indicated as boulevard streetscape plan, gateway landscaping and special arterial landscaping (RMGP, page 120). Exhibit 32, *Community Design Guidelines, Points of Interest*, in the City General Plan indicates that Highway 111 is a City designated view corridor, along with segments of Bob Hope Drive, Frank Sinatra Drive, Country Club Drive, Monterey Avenue, Ramon Road and Da Vall Drive (RMGP, page 119).

### *Visual Character*

The visual character of the City of Rancho Mirage is defined by the natural desert environment, the surrounding mountain ranges, and the manmade/built environment. The architecture throughout the Coachella Valley has a decidedly mixed heritage, which includes Spanish and Mediterranean designs, as well as desert modern designs, which combines modernist influences of the 1950s with desert colors and the latest technological materials. In the City of Rancho Mirage, desert architecture must contend with harsh elements and the conservation of resources. Additionally, architecture that blends into the landscape with a sense of indoor/outdoor living, is particularly appropriate and has created the manmade visual character of the City.

### *Light and Glare*

The City of Rancho Mirage lies within the Palomar restricted nighttime light zone that prohibits obtrusive nighttime lights. Therefore, in order to avoid excess glare within the City, the City prefers the use of low-scale, accent, and back lighting to highlight key entry points, signage, enhanced intersections, and feature landscaping. This preserves the night sky, while performing directional guidance, safety, and informational functions.

## *Rancho Mirage General Plan Draft Environmental Impact Report*

The Rancho Mirage General Plan Draft Environmental Impact Report (EIR) was certified in 2005 in support of the 2005 Update of the Rancho Mirage General Plan. An addendum to the 2005 EIR was established in 2017, with the updated City General Plan. The EIR Addendum is discussed subsequently. The 2005 EIR addresses the environmental effects associated with the implementation of the City General Plan in compliance with the California Environmental Quality Act (CEQA). Pursuant of the CEQA guidelines, the 2005 EIR analyzed the impacts of the General Plan to the aesthetic character and quality of the City, which is summarized as followed:

Per the EIR, the Santa Rosa Mountains are the major natural landscape feature of the Rancho Mirage area and provide significant scenic views for the Rancho Mirage community. The Santa Rosa Mountains are part of the Santa Rosa and San Jacinto Mountains National Monument and are recognized for their nationally significant biological, cultural, recreational, geological, educational and scientific values, as well as their magnificent vistas, wildlife, land forms, and natural and cultural resource.

In addition to the mountain backdrop, the surrounding desert context also provides a scenic vista in the Rancho Mirage area. The desert context offers daytime scenery and nighttime views of the evening sky that are valuable to the residents of the community as well as to observers from the Mount Palomar Observatory in San Diego County.

The built setting also contributes to the visual quality of the City. The major features of the existing setting include the low-density residential development, resort hotels, scenic arterials and corridors, gated communities, golf courses, and retail venues. Moreover, the low-density residential communities are designed with a low profile horizon that allows the mountain views to stand out. Many of these residential communities are gated communities, and therefore, the design of the walled perimeters of these communities is important to the overall visual character of the City. Rancho Mirage's resort character is attributed to the numerous golf courses and other private recreational amenities, as well as the presence of several major hotels. Lastly, the arterials and major corridors maintain scenic viewsheds in the City.

The existing scale and design of the City's built environment, as well as its land uses, complement and do not deter from the scenery of the mountain backdrop. The City requires large minimum setbacks and landscaped buffers, pedestrian plazas, shade structures, and rich agricultural façade detailing for

commercial developments proposed within the City. The required setbacks and landscaped buffers in these areas promote the preservation of scenic views from roadways and pedestrian walkway. Therefore, it was concluded in the EIR that the implementation of the General Plan Update would not significantly alter the views of the mountains because the preferred land use alternative of the General Plan Update, as well as its policies, encourages the continued development and enhancement of a low density, residential and resort community.

Per the 2005 EIR, the natural landscape features, including the surrounding desert context and the mountain vistas, the low density, gated country club communities, and the resort quality of the City are essential components to Rancho Mirage's overall visual character.

### *Rancho Mirage General Plan Addendum to the Final EIR*

The Addendum to the Final EIR was published in 2017 and acts as the environmental document updating the previously certified 2005 Final EIR. The Addendum describes the details of the Rancho Mirage 2017 General Plan Update and compares its impacts to those identified in the 2005 Final EIR. The analysis covers revisions to the Land Use, Circulation, Conservation and Open Space, Air Quality, Noise, Safety, Public Services and Facilities, Community Design, and Economic and Fiscal Elements in the General Plan.

Per the Addendum to the Final EIR, no new scenic vistas, corridors, resources, or views have been established, and the 2017 General Plan would not accommodate visual changes that would substantially degrade the visual character of the City. Additionally, designated State Scenic Highways are not located within the City boundaries. Policies that protect nighttime views from excessive glare and light will continue to be implemented in the 2017 General Plan.

## 4.1.4 Project Impact Analysis

### Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Threshold topic "b", involving state scenic highways, is not analyzed in great detail since screening criterion related to aesthetics concluded that there would be no impacts. Would the Project:

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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly

accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

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

## Methodology

The analysis of the potential aesthetic impact of the proposed Porcupine Creek Retreat Specific Plan project is provided in the following discussions. Aesthetic impacts are evaluated by considering proposed grading, landform alteration, building setbacks, scale, massing, typical construction materials, and landscaping features associated with the design of the project. The project's impact on scenic vistas and the existing visual character are objectively examined to determine whether development of the Porcupine Creek Retreat Specific Plan would have significant impacts on the property and surrounding area.

## Project Design Features

As previously described, the Porcupine Creek Retreat Specific Plan project proposes the development of up to 50 studio, single-bedroom, and multi-bedroom "keys", as well as a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, upgraded and additional retreat related facilities, and a rerouted 18-hole golf course. The Porcupine Creek Retreat Specific Plan establishes design guidelines, development standards, and architectural features that contribute to the proposed aesthetic of the project property. The design features are discussed further, subsequently.

### *Circulation*

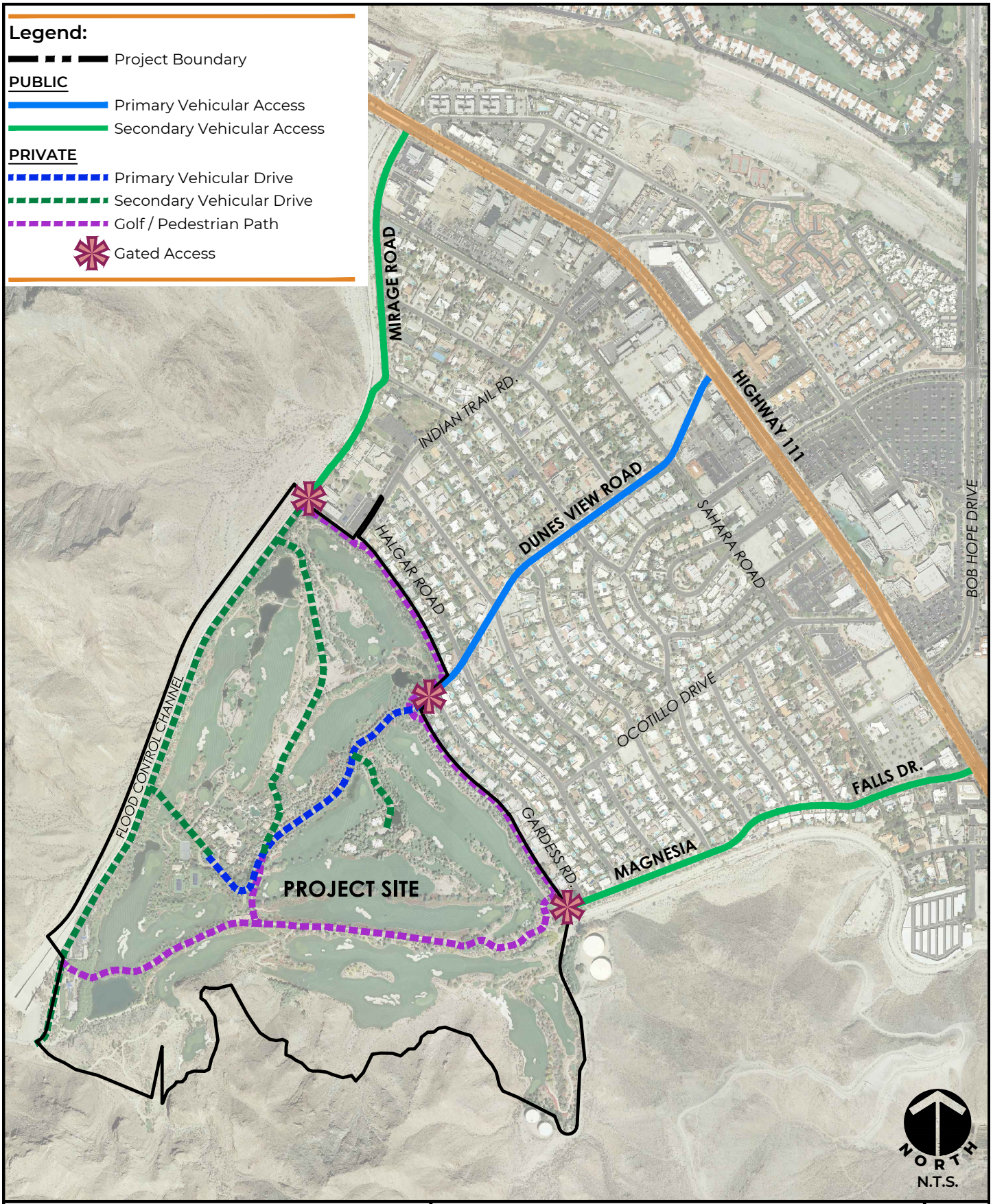
Currently, vehicular access to the property occurs at a primary gated entry at the center of the eastern property boundary. The primary entry point is utilized by the owner and guests and is enhanced with decorative concrete pavers, entry gates, a guard house, and landscaped areas. A secondary gated entry for service employees and deliveries is located at the property's northern corner. An existing network of private driveways serves the various buildings on site. These roads carry very low traffic volumes and accommodate safe pedestrian and golf cart movement within the project. **Exhibit 4.1.1, *Conceptual Circulation Plan*,** illustrates the circulation plan proposed for the project.

The interior vehicular circulation system consists of a network of private driveways with a central spine road leading from the primary entry on Dunes View Road to the estate's existing main residence. The private interior road system is intended to be adjusted and extended as needed to accommodate new construction and onsite expansions.

Project guests will arrive via vehicle at the main entrance. Private vehicles will be collected by a valet on arrival. Guests will then be shuttled to and from accommodations via golf cart. Parking will be

provided (within the gated property) along the access road (entrance at Mirage Road) and along the Magnesia North flood channel frontage road for staff, ground and maintenance employees as well as guest vehicles. Parking along the Magnesia North flood channel will continue to occur on one side of the access road, adjacent to the golf course, separated by landscaped slopes. Pedestrian circulation is provided within the project's private driveways and golf cart paths.

Pedestrian circulation is provided within the project's low-speed, low-volume, private streets and golf cart paths.

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# CONCEPTUAL CIRCULATION PLAN

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.1.1*

### *Recreational Amenities*

The Porcupine Creek Retreat Specific Plan project proposes to build upon existing open space and recreational amenities in an effort to enhance the retreat experience. Recreational amenities may include but are not limited to:

- Golf course and driving range
- Tennis courts
- Hiking trails
- Fitness and garden trails
- Swimming pools/spas
- Multi-purpose sport courts and fields
- Other potential retreat and low-intensity recreational uses within the existing open space areas of the property

### *Open Space Buffer*

The project will maintain the established buffer conditions which include golf and an open space buffer of 250 feet along the northeasterly and easterly boundary of the project site. The buffer will provide separation between the Retreat uses and existing neighboring residences. No new habitable buildings will be constructed within the buffer area, only minor reception, maintenance, golf, and accessory structures related to golf and other retreat uses would be allowed, subject to the development standards provided in the project Specific Plan.

### *Grading*

Proposed grading is intended to substantially maintain the existing site elevations with modifications to accommodate proposed expansions. Proposed grading will result in the creation of building pads for the construction of additional structures such as casitas and villas. The proposed grading will result in ground elevations which are similar to existing grades. These grades are subject to final engineering and actual field conditions that may result in adjustments to pad and street grades subject to plan check approval by the City. No grading is proposed within the open space buffer area other than what is necessary to adjust retention areas and minor reception, maintenance, golf, and accessory structures.

### *Signage*

The extensive use of signage at the Porcupine Creek property is not anticipated. Any on-site directional signage will be discreet. Signage that is not visible outside of the property will be subject to administrative approval by the Director of Development Services. Signage that is visible from outside the project will be subject to reviewing according to the provisions of Section 17.28.040, Sign Permit Review, of the Rancho Mirage Municipal Code.

### *Retreat Architectural Guidelines*

The overall architectural aesthetic of the Porcupine Creek Retreat Specific Plan is modern, minimalist detailing using traditional, Mediterranean-inspired materials to portray a serene, upscale retreat environment complementary of the surrounding local desert.

The retreat will incorporate natural materials and textures, subdued colors, and characteristic architectural elements that will be complemented by the landscape design. Large expanses of glazed doors will maximize natural light exposure and encourage interaction with the outdoors. Entry overhangs of varying scales will inform visitors of public versus private spaces, offer relief from the sun, and add interest to building facades.

Roofs

Hipped roofs clad in clay Spanish tile nod to the traditional Mediterranean style materials used throughout the property. Back-Of-House buildings, hidden from public and guest view, may make use of standing metal seem roofs in colors complementing the property.

Doors and Windows

Large spans of windows and glazed doors will create a visual and physical connection between the interior and exterior of the building and facilitate natural lighting of interior spaces. Architectural features such as overhangs, covered entryways, and trellises will enhance the facades and demarcate entrances as well as provide shade and reduce daytime heat gain.

Architectural Features

Articulation in the facades using wall step backs and roof overhangs adds visual interests and variation to the differently programmed buildings. Architectural emphasis on spaces of outdoor amenities, such as wooden decks and trellises, help to blur the line between natural environment and built structures. The use of columns and trellises to grow plant coverings will join the landscaping with the built environment.

Color

Materials and accessory structures used along the approach of the buildings will maintain a common, consistent architectural style within the retreat complex. Changes in material will be applied purposefully and, in a manner, corresponding to variations in the building mass and use. A balanced relationship between “hard” materials like stone cladding and clay tile and “soft” materials like glazing and plant-adorned wood, all in subdued, natural desert tones will create a palette characteristic to the retreat complex.

### *Development Standards*

Allowable Uses

- Retreat permits the following uses:
    - Hotel facilities
    - Guest rooms
    - Villas and casitas
    - Estate residence
    - Health and fitness facilities, indoor and outdoor
    - Spa services
    - Restaurants, lounges, and catered food service including remote pop-up service; indoor and outdoor
    - Meeting facilities
    - Entertainment activities for retreat guests
    - Recreational uses and open space
- Maintenance and back of house facilities
- Solar fields and related facilities
- Parking, including covered and enclosed
- Accessory Structures, including entry features, gatehouses, covered patios, decks, gazebos, sculptures, landscape/garden structures, greenhouses.

Allowable uses are to be in conformance with the project Development Agreement and implementing Development Plan Permit(s).

Additional project development standards provided in the table below.

**Table 4.1.1 Specific Plan Development Standards**

| | |
|---|---|
| ***Lot Size*** | |
| Total Lot Area | 191 Acres |
| Minimum Lot Area | None |
| Minimum Lot Width | None |
| Minimum Lot Depth | None |
| ***Building Setbacks[1, 2]*** | |
| Minimum Setback to Residential | 50 Feet |
| Minimum Setback to Public/School | 50 Feet |
| Minimum Setback to all other Project Boundaries | 50 Feet |
| ***Other*** | |
| Max. Structure Height in 250' Buffer | 20 Feet/1 Story |
| Max. Structure Height outside of 250' Buffer (Including Sculptures and Landscape Structures)[3] | 50 Feet/2 Story |
| Building Coverage | Maximum 250,000 sf. |
| Distance Between Structures | 15 Feet |
| Off-Street Parking Spaces [3] | 1.5 Spaces per key |

1. No new guest facilities or multi-story buildings would be located within the 250-foot buffer separating the retreat from existing residences.
2. Setbacks do not apply to gatehouses or utility structures (such as the existing Southern California Edison building that contains switchgear and transformers at the southern terminus of Magnesia Falls Drive); any new, non-habitable, utility structures in the buffer area shall be located at least 10' from any residential property line, and shall conform to the RMMC noise restrictions to avoid disruption to the quality of life of existing neighboring residents.
3. The number of required parking spaces may be reduced administratively by the Development Services Director if operational history or traffic study shows a decrease in observable demand for parking.

## Project Impacts

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetic resources are significant environmental effects, the following thresholds are analyzed and evaluated. Would the Project:

### *a. Have a substantial adverse effect on a scenic vista?*

The proposed Porcupine Creek Retreat Specific Plan project would result in less than significant impacts to the available surrounding scenic vista. Scenic vistas within the City of Rancho Mirage can be viewed in public lands, rights-of-ways, pedestrian pathways, designated state scenic highways or local scenic roadways and adjacent properties. Per the General Plan EIR, the Santa Rosa Mountains provide a natural, scenic backdrop to the City that is complemented by the surrounding natural desert

landscape present throughout the Coachella Valley. The natural desert context provides daytime scenery and nighttime views of the evening sky that are valuable to the residents of the community as well as to observers from the Mount Palomar Observatory in San Diego County (Rancho Mirage General Plan EIR, page 5-1). In addition to the natural setting, the built environment contributes to the scenic vista in the City when the existing scale and design of the City, as well as its uses, complement and do not deter from the scenery of the mountain backdrop.

As previously stated in Section 4.1.2, *Existing Conditions*, the approximately 191-acre Porcupine Creek Retreat Specific Plan project lies within the boundaries of the existing 230-acre Porcupine Creek estate. Porcupine Creek currently operates as private residence, with recreational amenities including a 19-hole golf course, tennis courts, and pool and spa areas. The project site is located at the west-end of Dunes View Road, approximately 0.50 miles southwest of Highway 111. The site is surrounded by medium density residential uses to the east, Rancho Mirage Elementary School to the north, and the Santa Rosa Mountains to the west and south. In this context, the project property is located adjacent to an urbanized and developed portion of the City, as well as an undeveloped and natural mountainous landscape in the City.

Views of the Santa Rosa Mountains from the surrounding public rights-of-way are obstructed by the existing residential buildings in the vicinity of the project property. The obstructions include landscaping features, block walls and perimeter fencing, and structures and building features. The maximum height of the majority of existing homes is 20'. Highway 111 is classified as a view corridor within the City of Rancho Mirage, according to Exhibit 32, *Community Design, Guidelines, Points of Interest,* in the Rancho Mirage General Plan (page 119). View corridors within the City are roadways that provide public viewsheds of the scenic vistas within the City. Views of the Santa Rosa Mountains along Highway 111 are somewhat obstructed by existing commercial buildings and landscaping. The privately owned project site lies approximately 0.50 miles southwest of Highway 111, and therefore, does not provide obstructions to motorists and pedestrians traveling along the view corridor because it is not visible.

Implementation of the proposed Porcupine Creek Retreat Specific Plan is not anticipated to obstruct the views of the surrounding scenic vistas such as the Santa Rosa Mountains, since development of the proposed structures will not exceed 50 feet or 2 stories, and appropriate building setbacks will be required. The open space buffer that currently exists on the eastern portion of the property, will be maintained as a buffer condition which includes existing golf, mature trees, open space, and limited one-story buildings within 250 feet of the property line. The buffer will provide separation between the Retreat uses and existing neighboring residences. Structures developed within this buffer area would consist of only minor reception, maintenance, golf and accessory structures related to golf and other retreat uses. Structure height within this 250-foot buffer area would not exceed 20 feet.

As stated in previously, the grading at the project site is intended to substantially maintain the existing site elevations with modification to accommodate proposed expansions. Proposed grading will result

in the creation of building pads for the construction of additional structures such as casitas and villas. The proposed grading will result in ground elevations which are similar to existing grades. These grades are subject to final engineering and actual field conditions that may result in adjustments to pad and street grades subject to plan check approval by the City. No grading is proposed within the open space buffer area other than what is necessary to adjust retention areas and minor reception, maintenance, golf, and accessory structures.

Public view of the Santa Rosa Mountains is currently viewed along public roadways in the residential area east of the project property. Project implementation will not further obstruct the views of this scenic vista beyond the existing condition because building grades will be similar to the current grades and building setbacks will be maintained. Less than significant impacts are anticipated.

### *c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

## Existing Scenic Quality and Visual Character

The visual character and scenic quality within the City of Rancho Mirage is defined by the mountainous topography, including the Santa Rosa Mountains, that distinguishes the City's southern boundary, the natural desert context, and the manmade and built environment, including landscaping and gated residential communities.

The scenic quality that currently exists in the vicinity of the property is primarily comprised of the single family residential community immediately east of the property, and the Santa Rosa Mountains immediately west and south of the property.

Although the property's western and southern boundaries lie adjacent to the Santa Rosa Mountains, the Porcupine Creek Retreat Specific Plan property is located in an urbanized context of the City of Rancho Mirage. The urbanized context in which the project property lies is attributed to the medium density residential uses immediately east of the Porcupine Creek property and a regional corridor (Highway 111) approximately 0.50 miles northeast of the property. Commercial uses, including business offices, restaurants, and shopping plazas, are located adjacent to Highway 111. The project's western and southern boundaries are met by the Santa Rosa Mountains, which are undeveloped, and natural, apart from the established public hiking trails.

The current Porcupine Creek land use and zoning designations include Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage Areas (OS-W), and Mountain Reserve (MR). The scenic quality valued in these land use and zoning designations include: the natural

landscape of the Santa Rosa Mountains, as well as manmade developments that utilize maintained landscaping and unique architectural design that is not obstructive or obtrusive to the surrounding natural desert environment or views.

The Porcupine Creek property currently operates as a private residence with golf course and multiple recreational amenities. The site is actively maintained, with a green and landscaped golf course, perimeter landscaping, and a private setting inside the property's gates.

## Proposed Scenic Quality and Visual Character

The Porcupine Creek Retreat Specific Plan project proposes the development of up to 50 studio, single-bedroom and multi-bedroom "keys", along with a modified main house, a new restaurant and dining deck an upgraded spa complex, additional casitas and villas, upgraded and additional retreat related facilities, and a rerouted 18-hole golf course. Development of the property will occur within the existing boundaries of the Porcupine Creek estate. The Porcupine Creek Retreat Specific Plan proposes to create a retreat with private recreational facilities. The location of the additional villas and casitas will be clustered throughout the property, leaving room for the rerouted golf course, generous open space amenities, and a landscaped buffer along project boundaries.

As previously stated, the land use and zoning designations that currently classifies the Porcupine Creek property includes R-L-2, OS-PV, OS-W, and MR. Project entitlements will include a General Plan Zoning Map Amendment (GPZMA) which will amend the land use and zoning designations to Specific Plan with an underlying zoning designation of Resort Hotel (Rs-H) , as well as a Lot Line Adjustment (LLA) to adjust existing parcel lines to create a single legal parcel for the Specific Plan property and separate legal parcels for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Conservation Area/Measure V Mountainous Lands located outside the Specific Plan. According to Chapter 17.14.030, Overlay districts, in the Rancho Mirage Municipal Code (RMMC) the S-P Overlay is established to designate areas subject to provisions of an adopted specific plan, in compliance with Chapter 17.54. The S-P Overlay is intended to be used in conjunction with an appropriate base zone and may be deemed consistent with one or more land use designation of the general plan. Per Chapter 17.10, Commercial and Industrial Districts, the Resort Hotel zoning district is applied to areas appropriate for hotels and destination resorts, including condo-hotel projects, with limited ancillary commercial uses, including restaurants and health spas that directly support the primary use. The proposed Resort Hotel designation will maintain the resort character of the City.

In addition to the proposed project's compliance with the City development standards, the Porcupine Creek Retreat Specific Plan includes guidelines and development standards to ensure quality development consistent with the goals, objectives, and policies of the City of Rancho Mirage General Plan. The Specific Plan defines the location, type and amount of development allowed within the Specific Plan area consistent with the requirements for Specific Plans identified in State Planning and

Land Use Law and Section 17.54 of the RMMC. It also establishes standards intended to allow the retreat to respond to market conditions.

Per the Specific Plan, the project proposes two basic land uses within the SP area that will define the design of the area. The two basic land uses include Retreat and Flood Control Channel, and are discussed subsequently.

The Retreat use covers the existing estate compound as well as necessary enhancements for buildout of the retreat. The footprint of this area has already been entirely developed with manmade improvements such as buildings, driveways, parking areas, golf course fairways, recreational facilities, pools, pathways, utilities, as well as other supporting site, building and landscaping improvements. The East Magnesia Flood Channel is a second flood conveyance area within the golf course which directs flows from the hillside through the property to the Flood Channel. The East Magnesia Flood Channel is included in the Retreat use.

To achieve the retreat's aesthetic goal, the project will consist of modern, minimalist detailing using traditional, Mediterranean-inspired materials to portray a serene, upscale retreat environment complementary of the surrounding local desert. The retreat will incorporate natural materials and textures, subdued colors, and characteristic architectural elements that will be complemented by the lush landscape design. Project landscaping and building architecture will remain consistent with the existing structures onsite to maintain visual consistency. Materials and accessory structures used along the approach of buildings will maintain a common, consistent architectural style within the retreat complex. Changes in material will be applied purposefully and, in a manner, corresponding to variations in the building mass and use.

The Flood Control Channel contains facilities associated with the Coachella Valley Water District (CVWD) flood control channel including a concrete flood channel, fencing, access road, and storage/maintenance buildings. The flood channel and maintenance road serve as a physical barrier between the Retreat and the natural desert/hillside areas to the northwest.

Although the project site is proposing up to 50 keys, compared to their existing 23 keys on the property, the Porcupine Creek Retreat Specific Plan project will not degrade scenic quality of the City because the project will not introduce features not allowed within the existing or proposed land use designations, and the additional development will be compatible with the existing estate in terms of size and scope of additional improvements.

Porcupine Creek currently operates as a private residence that is not open to the public. The proposed project will comply with the Porcupine Creek Retreat Specific Plan, if approved by the City of Rancho Mirage. Development of the site will not include the substantial degradation of the scenic quality within the City or conflict with applicable zoning and other regulations governing scenic quality. Therefore, less than significant impacts are anticipated.

### *d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The 191-acre Porcupine Creek Retreat Specific Plan property lies approximately 0.50 miles southwest of Highway 111, at the west-end of Dunes View Road, and north and east of the Santa Rosa Mountains. Porcupine Creek currently operates as a private residence with multiple recreational facilities including a 19-hole golf course, tennis courts, and pool and spa areas. The developed property currently contributes to existing sources of glare and light in the City of Rancho Mirage. Existing sources of light on the project property are attributed to the existing structures and infrastructure on the property. The existing lighting utilized for the Porcupine Creek property include low-intensity, wall-mounted, downward-oriented fixtures illuminating doorways, outdoor areas, as well as parking areas. Light fixtures used to highlight landscaping and pathways are also used onsite.

In the project vicinity, light and glare are attributed to the medium density residential community east of the project boundaries, as well as the Rancho Mirage Elementary School, which lies adjacent to the property's northern corner. Similar to the Porcupine Creek property, light fixtures used for the surrounding residential properties include low-intensity, wall-mounted, downward-oriented fixtures illuminating doorways, outdoor patio areas and yards, and landscaping. Fixed lighting from the Elementary School typically includes wall-mounted fixtures at building entrances and light posts throughout the property, on sports fields and in the parking area for safety. Non-fixed and temporary sources of existing ambient lighting in the project vicinity is attributed to vehicular traffic on the surrounding roadways. This primarily includes vehicles in the residential community, as well as vehicles traveling to and from the Rancho Mirage Elementary School.

The City of Rancho Mirage is located in the Palomar Observatory restricted nighttime light zone that prohibits obtrusive nighttime lights. Therefore, lower scale, accent, and back lighting is the preferred alternative and can have a dramatic effect during the beautiful desert evening (Rancho Mirage General Plan, page 130). In order to avoid light pollution created in Riverside County, the County established Ordinance No. 655, Regulating Light Pollution, to restrict the permitted use of certain light fixtures emitting into the night sky undesirable light rays which have a detrimental effect on astronomical observations and research. The allowed lighting within the ordinance must be fully shielded if feasible and partially shielded in all other cases and must be focused to minimize spill light into the night sky and onto adjacent properties. The property, in its existing state, does not introduce substantial amounts of light or glare and is compliant with the existing requirements established in the Rancho Mirage General Plan and the Riverside County Ordinance No. 655.

As stated previously, the Porcupine Creek property currently operates as a private residence with multiple recreational amenities, including golf, tennis, and pool and spa facilities. The estate includes main residence and adjacent casitas totaling in approximately 25,000 square feet, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and

shade structures. Currently, the total building area on the estate is approximately 66,500 square feet. The proposed Porcupine Creek Retreat Specific Plan project may introduce additional lighting to the project area since the project is proposing the development of up to 27 additional keys, restaurants and recreational areas for guest use. The addition of these areas may incrementally increase the amount of light produced by the project compared to the current use.

The project's lighting is expected to continue to implement low intensity nighttime illumination to highlight elements of the project and contribute to an enhanced streetscape setting. The project will provide various forms of lighting to adequately illuminate the parking areas, entrances, signage, walkways, and other project features for security purposes. The use of exterior light fixtures will be made compatible with the architectural style and materials of the buildings. In compliance with Chapter 17.18.050 of the Rancho Mirage Municipal Code, the proposed lighting must be situated to prevent emissions of glare or light beyond the property line. Moreover, the proposed lighting is not permitted to blink, flash, or be of unusually high intensity or brightness. All fixtures shall be appropriate in scale, intensity and height to the uses they are serving. Additionally, the Community Design (CD) Element of the Rancho Mirage General Plan Update states that lighting shall be directed downward to protect from nighttime glare and illuminate pedestrian pathways and bollard lighting (Policy CD 10.5).

The extensive use of signage at Porcupine Creek is not anticipated. Any on-site directional signage will be tasteful and discreet. Signage that is not visible outside the property will be subject to administrative approval by the Director of Development Services. Signage that is visible from outside the project will be subject to review according to the provisions of Section 17.28.040 of the RMMC. Per 17.28.040, sign permit application must include sign details indicating the location of all existing and proposed signs with sign area and dimensions for the entire project site, structure elevations with proposed signs, and the method of attachment for wall signs. Additionally, the application must include the type and method of illumination (interior/exterior), intensity of lumens and watts, and electrical installation and insulation devices where applicable.

Regarding glare, the proposed project will introduce architectural features that will incorporate natural materials and textures, subdued colors, and characteristic elements that will be complemented by the landscape design. A balanced relationship between hard materials like stone cladding and clay tile and soft materials like glazing and plant-adorned wood, all in subdued, natural desert tones, will create a palette characteristic to the retreat complex. The buildings and supporting infrastructure will not use highly reflective construction materials or other conditions that would cause substantial daytime or nighttime glare. The proposed building finishes primarily consist of exterior stone wall cladding, stucco finishes, teak and white oak wood finishes. The use of natural exterior finishes will not cause glare. The proposed landscaping and building setback will function as a visual screen to soften the visibility of buildings from the interior streets and pathways.

Solar facilities are also permitted at the Porcupine Creek Retreat, however, glare from the solar panels will not be significant because they do not create a substantial amount of glint (a momentary flash or bright light) or glare (a reflection of bright light for a longer duration). Solar panels are constructed of dark-colored (blue or black) materials and are covered with anti-reflective coatings, and are designed to absorb, rather than reflect, solar radiation.

The proposed Porcupine Creek Retreat Specific Plan project may introduce new ambient light to the City of Rancho Mirage; however, it is not anticipated to be substantial and will comply with all regional and local lighting standards. Materials proposed for the project structures will consist of natural and neutral materials and colors and are not expected to create a substantial amount of glare in the area. The Porcupine Creek Retreat Specific Plan lists design guidelines and standards which, when approved, will be followed by the project. Additional site design guidelines and plans will be submitted and reviewed by the City of Rancho Mirage to ensure that design features comply with the guidelines set in the Rancho Mirage Municipal Code as well as the goals and policies of the Rancho Mirage General Plan. With the foregoing, the proposed project is not anticipated to create a substantial source of additional light or glare that would adversely affect daytime or nighttime views in the area, and no mitigation is required.

### 4.1.5 Cumulative Impacts

There are no cumulative impacts associated with the proposed project related to aesthetics, since the project is currently developed as a private property with supporting infrastructure. Although the location of the Porcupine Creek Retreat Specific Plan project area lies adjacent to the slopes of the Santa Rosa Mountains, impacts to the local scenic vista will not be significant since the project will comply with the City standards and guidelines regarding building heights and setbacks as required by the Rancho Mirage Municipal Code. Additionally, the Rancho Mirage General Plan Update outlines various goals, policies and standards for land use categories, community design features, and building architecture, that impact the visual character of the City. These policies and regulations, in conjunction with the existing Porcupine Creek property and proposed Specific Plan, would reduce cumulative impacts associated with aesthetic resources to a less than cumulatively considerable level.

The Porcupine Creek Retreat Specific Plan sets forth a comprehensive vision for Porcupine Creek that guides future development of the project. The Specific Plan describes the primary master plan components required for further development of the property and establishes the allowable uses and development standards applicable within the SP area. In addition to the Specific Plan, the project will seek approval of a Preliminary Development Plan (PDP). The PDP will demonstrate the design guidelines required by the Specific Plan to ensure architecture, landscape, and site design that complements existing estate improvements. The approval of the SP and the PDP will ensure cumulative impacts associated with aesthetic resources will be reduced to a less than cumulatively considerable level.

### 4.1.6 Mitigation Measures

No Mitigation Measures are required.

### 4.1.7 Level of Significance after Mitigation

Not applicable.

### 4.1.8 Resources

1. State Scenic Highways, Caltrans, website https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed April 2020.
2. Streets and Highways Code – SHC; Division 1. State Highways, Chapter 2. The State Highway System, Article 2.5 State Scenic Highways, California Legislative Information, https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5., accessed May 2020.

# 4.2 Air Quality

## 4.2.1 Introduction

The purpose of this section is to discuss the existing air quality setting in the Coachella Valley and analyze the potential impacts resulting from implementation of the Porcupine Creek Retreat Specific Plan. The air quality principles, descriptions and supporting analysis rely on the relevant background research and information made available in various public regulatory and reference documents cited throughout this section. Reference documents include sections of the Federal *Clean Air Act* (CAA); *Final 2016 Air Quality Management Plan* (AQMP), by South Coast Air Quality Management District (SCAQMD), March 2017; *Final 2003 Coachella Valley PM10 State Implementation Plan* (CVSIP), by SCAQMD, August 2003; *Analysis of the Coachella Valley PM10 Redesignation Request and Maintenance Plan*, by the California Air Resources Board, February 2010; and sections of the SCAQMD Rule Book.

At the localized level, the analysis relies on the project-specific quantitative results from the California Emissions Estimator Model™ (CalEEMod™), Version 2016.3.2. CalEEMod is a statewide land use emissions computer model developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts, to provide a uniform platform for quantifying potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. To determine the findings of significance, project-specific emissions quantities are compared against the air quality significance thresholds established in SCAQMD's CEQA Handbook. The supporting air emissions modeling results referenced herein are provided in the Appendices of this Draft EIR (**Appendix B.1 and B.2**).

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with air quality at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR.

## 4.2.2 Existing Conditions

### Regional Air Basin Conditions

The project site and its Coachella Valley regional context are situated within the Riverside County portion of the Salton Sea Air Basin (SSAB), under jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SSAB is aligned in a north-west-southwest orientation stretching from Banning Pass to the Mexican border. The regional climate, as well as the temperature, wind, humidity, precipitation, and amount of sunshine significantly influence the air quality in the SSAB.

The climate of the Coachella Valley is a continental, desert-type climate, with hot summers, mild winters, and very little annual rainfall. Precipitation in the Coachella Valley averages 3.6 inches per year, which is 65 to 75% less annual precipitation than western portions of Riverside County and the coastal counties in Southern California. The region has no defined rainy (wet) season, considering that convective rainfall events (summer thunderstorms) make up a large portion of Whitewater River Region annual rainfall, in contrast to the general winter precipitation that dominates rainfall events in western Riverside County and the coastal plains. When storms occur, they tend to be discrete convective cells, and feature short but intense rainfall, typical of monsoonal thunderstorms; individual storm events typically are localized and rarely affect the entire drainage network. Temperatures tend to exceed 100 degrees Fahrenheit (°F), on the average, for four months each year, with daily highs near 110 °F during July and August. Summer nights are cooler with minimum temperatures in the mid-70s. During the winter season, daytime highs are quite mild, but the dry air is conducive to nocturnal radiational cooling, with early morning lows around 40 °F.

The Coachella Valley and adjacent areas are exposed to frequent gusty winds. The flat terrain of the valley and strong temperature differentials, created by intense solar heating, produce moderate winds and deep thermal convection. Wind speeds exceeding 31 miles per hour (mph) occur most frequently in April and May. On an annual basis, strong winds (greater than 31 mph) are observed 0.6 percent of the time and speeds of less than 6.8 mph account for more than one- half of the observed winds. Prevailing winds are from the northwest through southeast, with secondary flows from the southeast. The strongest and most persistent winds typically occur immediately to the east of Banning Pass, which is noted as a wind power generation resource area. Aside from this locale, the wind conditions in the remainder of the Coachella Valley are geographically distinct. Portions of the SSAB experience surface inversions almost every day of the year. Inversions in the SSAB are attributed to strong surface heating, but are usually broken, allowing pollutants to disperse more easily. Weak surface inversions are caused by cooling of air in contact with the cold surface of the earth at night. In the valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. In addition, inversions in the SSAB caused by the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms the air to a temperature higher than the air below. This subsidence inversion can act as a nearly impenetrable lid to the vertical mixing of pollutants. These inversions can persist for one or more days, causing air stagnation and the buildup of pollutants. Subsidence inversions are common from November through June, and are relatively absent from July through October.

Within the project area, there is a natural sand migration process, called “blowsand,” that has direct and indirect effects on air quality. Blowsand produces particulate matter ($PM_{10}$) in two ways: (1) by direct particle erosion and fragmentation as natural $PM_{10}$, and (2) by secondary effects, as sand deposits on road surfaces. SCAQMD has defined a Coachella Valley Blowsand Zone as the corridor of land extending two miles on either side of the Interstate 10 (I-10) Freeway, beginning at the SR-111/I-10 junction and

continuing southeast to the I-10/ Jefferson Street interchange in Indio. Being located approximately 5 miles south of the I-10 Freeway, the project site is found outside of this designated blowsand area.

### Local Conditions

The project site includes a developed area of approximately 191-acres, primarily consisting of a landscaped golf course and estate facilities. The northerly, westerly, and southerly edges of the private estate grounds are met by undeveloped steep terrain corresponding to the Santa Rosa Mountains. In relation to the site, the neighboring hillside features have a relatively higher elevation ranging from 400 to 1000 feet. Developed land to the east of the project site includes residential uses and Rancho Mirage Elementary School along a shallow gradient descending to the valley floor. The eastern property edge of the project site consists primarily of golf course and related improvements that provide an open space buffer from the existing school and homes. This physical separation will be further discussed in the subsequent analysis.

Some receptors are considered more sensitive to air pollutants than others, because of preexisting health problems, proximity to the emissions source, or duration of exposure to air pollutants. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods. Recreational land uses are moderately sensitive to air pollution because vigorous exercise associated with recreation places having a high demand on respiratory system function. CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases.

## 4.2.3 Regulatory Setting

### Federal

#### *Clean Air Act*

The Federal Clean Air Act (CAA) is the law that defines EPA's responsibilities for protecting and improving the nation's air quality. It was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards (NAAQS) for managing criteria air pollutants: $O_3$, CO, $NO_x$, $SO_2$, $PM_{10}$, $PM_{2.5}$, and lead, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants $O_3$, $NO_2$, $SO_2$, $PM_{10}$, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for $O_3$ and to adopt a NAAQS for $PM_{2.5}$. Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and $NO_X$. $NO_X$ is a collective term that includes all forms of $NO_X$ which are emitted as byproducts of the combustion process.

## State

### *California Clean Air Act*

The California Clean Air Act (CCAA) became effective on January 1, 1989 and mandated health-based air quality standards at the state level. The California Air Resources Board (CARB) is responsible for enforcing state standards, which is achieved through State Implementation Plans (SIP), prepared to assist regional air quality management districts in meeting the federal and state ambient air quality standards in accordance with the deadlines specified in the Federal Clean Air Act (CAA) and emission reduction targets of the California Clean Air Act.

## Regional and Local

### *South Coast Air Quality Management District*

Regional and local agencies have also assumed some responsibility for assuring that state and federal air quality standards are achieved. California is divided geographically into air basins for the purpose of managing air resources. The Coachella Valley is in the Salton Sea Air Basin (SSAB), and the South Coast Air Quality Management District (SCAQMD) is responsible for establishing air quality measurement criteria and relevant management policies for the SSAB.

The SSAB, including the Coachella Valley, is subject to the provisions of the SCAQMD Rule Book, which sets forth policies and other measures designed to meet federal and state ambient air quality standards. These rules, along with SCAQMD's 2016 Air Quality Management Plan, are intended to satisfy the planning requirements of both the federal and State Clean Air Acts. The SCAQMD also monitors daily pollutant levels and meteorological conditions throughout the District.

The 2003 PM10 Coachella Valley State Implementation Plan (CVSIP) was jointly developed by the SCAQMD, Coachella Valley Association of Governments (CVAG) and its member cities and was approved by the USEPA. The 2003 PM10 CVSIP updated the 1990 plan, which was drafted as a requirement of the federal Clean Air Act to demonstrate expeditious attainment of PM10 standards. On April 18, 2003, the USEPA approved the updated CVSIP.

## Air Quality Standards

Federal and state air quality standards established for specific criteria pollutants, which are designed to protect the general population and segments of the population deemed most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those weak from disease or illness. The following air pollutants are collectively known as criteria air pollutants and are defined as pollutants for which established air quality standards have been adopted by federal and state governments:

**Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO emissions are attributed to sources that burn fuel, such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating. Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The SSAB is in attainment for CO.

**Sulfur Dioxide ($SO_2$)** is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO2 oxidizes in the atmosphere, it forms SO4. Collectively, these pollutants are referred to as sulfur oxides (SOX). A few minutes of exposure to low levels of $SO_2$ can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to $SO_2$. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of $SO_2$. The SSAB is in attainment for $SO_2$.

**Nitrogen Oxide ($NO_X$)** includes Nitric oxide (NO) and Nitrogen dioxide ($NO_2$), which are the primary oxides of nitrogen, and combined are known as nitrogen oxides. These oxides are produced at high temperatures during combustion as byproducts of motor vehicles, power plants, and off-road equipment. NOx contributes to the formation of ozone serving as the primary receptor of ultraviolet light and initiating the photochemical reaction. Short-term exposure to nitrogen dioxide can result in airway constriction and diminished lung capacity and is highly toxic by inhalation. Populations living near roadways are more likely to experience the effects of nitrogen oxides due to elevated exposure to motor vehicle exhaust. The SSAB is in attainment for $NO_2$.

**Ozone ($O_3$)** is a highly reactive and unstable gas that is formed when VOCs and $NO_X$, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. $O_3$ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue. Children and people with pre-existing lung disease are most susceptible to the effects of ozone. The SSAB is in non-attainment for the federal 8-hour O3 standard.

**Particulate Matter ($PM_{10}$ and $PM_{2.5}$)** consists of fine suspended particles of ten microns or smaller in diameter, and are the byproducts of road dust, sand, diesel soot, windstorms, and the abrasion of tires and brakes. $PM_{2.5}$ are particles which are 2.5 microns or smaller (which is often referred to as fine particles). The elderly, children, and adults with pre-existing respiratory or cardiovascular disease are most susceptible to the effects of PM. Elevated PM10 and PM2.5 levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks, and hospital admissions. The SSAB is a non-attainment area for PM10 and is classified as attainment/unclassifiable for $PM_{2.5}$.

**Volatile Organic Compounds (VOC)** are also known as Reactive Organic Gas (ROG). This class of pollutants has no state or federal ambient air quality standards and is not classified as criteria pollutants; however, they are regulated because they are responsible for contributing to the formation of ozone. They also contribute to higher PM10 levels because they transform into organic aerosols when released into the atmosphere. Breathing VOCs can irritate the eyes, nose and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several. VOCs pose a health threat when people are exposed to high concentrations. Benzene, for example, is a hydrogen component of VOC emissions known to be a carcinogen.

**Lead (Pb)** occurs in the atmosphere as particulate matter resulting from the manufacturing of batteries, paint, ink, and ammunition. Exposure to lead can result in anemia, kidney disease, gastrointestinal dysfunction, and neuromuscular and neurological disorders. Babies in utero, infants, and children are especially susceptible to health risks associated with exposure to lead by impacting the central nervous system and causing learning disorders. The SSAB is in attainment for lead.

The criteria air pollutants that are most relevant to current air quality planning and regulation in the Salton Sea Air Basin (SSAB) include ozone ($O_3$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), respirable particulate matter ($PM_{10}$), fine particulate matter ($PM_{2.5}$), sulfur dioxide ($SO_2$), and lead (Pb). The state and AAQS and their attainment status in the SSAB for each of the criteria pollutants are summarized in **Table 4.2.1*, Ambient Air Quality Standards and Attainment Status***. Under federal and state standards, the SSAB is currently designated as nonattainment for $O_3$ and $PM_{10}$.

Existing air quality in relation to the applicable air quality standards for criteria air pollutants is measured at air quality monitoring stations throughout the SCAQMD jurisdiction. The three permanent ambient air quality monitoring stations in the Coachella Valley are located in Palm Springs (AQS ID 060655001), Indio (AQS ID 060652002), and Mecca (Saul Martinez - AQS ID 060652005).

**Table 4.2.1 Ambient Air Quality Standards and Attainment Status**

| Pollutant | Averaging Period | California | | Federal | |
|---|---|---|---|---|---|
| | | Standards | Attainment Status | Standards | Attainment Status |
| Ozone (O3) | 1-hour | 0.09 ppm (180 µg/m$^3$) | Nonattainment | - | Nonattainment |
| | 8-hour | 0.070 ppm (137 µg/m$^3$) | | 0.070 ppm (137 µg/m$^3$) | |
| Nitrogen Dioxide (NO2) | Annual Arithmetic mean | 0.03 ppm (57 µg/m$^3$) | Attainment | 0.053 ppm (100 µg/m$^3$) | Unclassified/ Attainment |
| | 1-hour | 0.18 ppm (339 µg/m$^3$) | | 0.100 ppm (188 µg/m$^3$) | |
| Carbon Monoxide (CO) | 8 hours | 9.0 ppm (10 mg/m$^3$) | Attainment | 9 ppm (10 mg/m$^3$) | Unclassified/ Attainment |
| | 1 hour | 20 ppm (23 mg/m$^3$) | | 35 ppm (40 mg/m$^3$) | |
| Sulfur Dioxide (SO2) | 1 hour | 0.25 ppm | Attainment | 0.075 ppm | Attainment |
| | 24 hour | 0.04 ppm | | - | |
| Lead (Pb) | 30-day average | 1.5 µg/m$^3$ | Attainment | - | Unclassified/ Attainment |
| | Rolling 3-month average | - | | 0.15 µg/m$^3$ | |
| Respirable Particulate Matter (PM10) | 24 hour | 50 µg/m$^3$ | Nonattainment | 150 µg/m$^3$ | Nonattainment |
| | Annual arithmetic mean | 20 µg/m$^3$ | | - | |
| Fine Particulate Matter (PM2.5) | 24 hour | - | Attainment | 35 µg/m$^3$ | Unclassified/ Attainment |
| | Annual arithmetic mean | 12 µg/m$^3$ | | 12 µg/m$^3$ | |

*Source: California Air Resources Board website at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf (accessed August 2020) and CARB, "Area Designations Maps/State and National," http://www.arb.ca.gov/desig/adm/adm.htm*

*Note: ppm = parts per million.*

The air quality of a particular locale is considered to be in attainment if the measured ambient air pollutant levels for O3, CO, SO2 (1-hour and 24-hour), $NO_2$, and PM10 and PM2.5 are not exceeded and all other standards are not equaled or exceeded at any time in any consecutive three-year period. Attainment also assumes the national standards (other than $O_3$, PM10, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The $O_3$ standard is in attainment 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.

### *Criteria Air Pollutant Designations*

Air quality in the SSAB exceeds state and federal standards for fugitive dust (PM10) and ozone ($O_3$) and is in attainment/unclassified for PM2.5. Ambient air quality in the SSAB, including the project area, does not exceed state and federal standards for carbon monoxide, nitrogen dioxides, sulfur dioxide, lead, sulfates, hydrogen sulfide, or Vinyl Chloride.

#### *$PM_{10}$*

As indicated in the 2016 AQMP, the Coachella Valley is currently designated as a serious nonattainment area for $PM_{10}$ (particulate matter with an aerodynamic diameter of 10 microns or less). In the Coachella Valley, the man-made sources of $PM_{10}$ are attributed to direct emissions, industrial facilities, and fugitive dust resulting from unpaved roads and construction operations. High-wind natural events are also known contributors of $PM_{10}$. The Clean Air Act (CAA) requires those states with nonattainment areas to prepare and submit the corresponding State Implementation Plans (SIPs) to demonstrate how these areas will attain the National Ambient Air Quality Standards (NAAQS). The implementation strategies include modeling, rules, regulations, and programs designed to provide the necessary air pollutant emissions reductions.

Pertaining to $PM_{10}$ attainment, the Final 2003 Coachella Valley $PM_{10}$ State Implementation Plan (CVSIP) was approved by the U.S. Environmental Protection Agency (EPA) on December 14, 2005. It incorporated updated planning assumptions, fugitive dust source emissions estimates, mobile source emissions estimates, and attainment modeling with control strategies and measure commitments. Some of those measures are reflected in SCAQMD Rules 403 and 403.1, which are enacted to reduce or prevent man-made fugitive dust sources with their associated $PM_{10}$ emissions. The CVSIP established the controls needed to demonstrate expeditious attainment of the standards such those listed below:

- Additional stabilizing or paving of unpaved surfaces, including parking lots;
- A prohibition on building new unpaved roads;
- Requiring more detailed dust control plans from builders in the valley that specify the use of more aggressive and frequent watering, soil stabilization, wind screens, and phased development (as opposed to mass grading) to minimize fugitive dust;
- Designating a worker to monitor dust control at construction sites; and
- Testing requirements for soil and road surfaces.

On February 25, 2010, the ARB approved the 2010 Coachella Valley $PM_{10}$ Maintenance Plan and transmitted it to the U.S. EPA for approval. With the recent data being collected at the Coachella Valley monitoring stations, consideration of high-wind exceptional events, and submittal of a $PM_{10}$ Re-designation Request and Maintenance Plan, a re-designation to attainment status of the $PM_{10}$ NAAQS is deemed feasible in the near future according to the 2016 AQMP.

Chapter 7.01 (*Control of PM10, Fugitive Dust and Other Emissions*) of the Rancho Mirage Municipal Code has been enacted to establish the minimum requirements for construction and demolition activities and other specified sources in order to reduce man-made fugitive dust and the corresponding PM10 emissions. The corresponding performance standards are based upon the methodologies included in the Coachella Valley Dust Control Handbook, which has been prepared in accordance with CVSIP and SCAQMD Rule 403 and 403.1 referenced above.

### *$O_3$ (Ozone and Ozone Precursors)*

The Coachella Valley portion of the Salton Sea Air Basin (SSAB) is deemed to be in nonattainment for the 1997 8-hour ozone standard. Coachella Valley is unique in its geography due to its location downwind from the South Coast Air Basin (SCAB). As such, when high levels of ozone are formed in the South Coast Air Basin, they are transported to the Coachella Valley. Similarly, when ozone precursors such as nitrogen oxides (NOx) and volatile organic compounds (VOCs) are emitted from mobile sources and stationary sources located in the South Coast Air Basin, they are also transported to the Coachella Valley. It is worth noting that SCAQMD deems that local sources of air pollution generated in the Coachella Valley have a limited impact on ozone levels compared to the transport of ozone precursors generated in SCAB.

The U.S. EPA classifies areas of ozone nonattainment (i.e., Extreme, Severe, Serious, Moderate or Marginal) based on the extent to which an area exceeds the air quality standard for that pollutant. The higher the exceedance level, the more time is allowed to demonstrate attainment in recognition of the greater challenge involved. However, nonattainment areas with the higher classifications are also subject to more stringent requirements. In the 2016 AQMP, the attainment target date for the 1997 8-hour ozone standard was listed as June 15, 2019. However, based on recent data for higher levels of ozone experienced in 2017 and 2018, it was determined that the Coachella Valley region could not practically attain the said standard by the established deadline. Given that additional time is needed to bring the Coachella Valley into attainment of the ozone standard, SCAQMD submitted a formal request to the United States Environmental Protection Agency (U.S. EPA) to reclassify the Coachella Valley from Severe-15 to Extreme nonattainment, with a new attainment date of June 15, 2024. The reclassification ensures that the Coachella Valley will be given the needed extension to make attainment feasible and prevent the imposition of the non-attainment fees on major stationary sources. This process would also require SCAQMD to develop or update the State Implementation Plan (SIP) documentation to demonstrate how the area will meet the standard on or before June 15, 2024.

SCAQMD continues to reduce ozone and improve air quality in the Coachella Valley, in part by providing more than $50 million in grant funding towards paving dirt roads and parking lots, clean energy projects and cleaner vehicles. Future emission reductions anticipated to occur in the South Coast Air Basin associated with current and planned regulations on mobile and stationary sources are expected to contribute to improvements in ozone air quality in the Coachella Valley and lead to attainment of the standard.

### *SCAQMD Rules*

Among the SCAQMD rules applicable to the project are Rule 403 (Fugitive Dust), Rule 403.1 (Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources), and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures to minimize PM10 emissions during grading and construction activities. Rule 403.1 requires active operations within a Blowsand Zone stabilize new man-made deposits of bulk material and requires a fugitive dust control plan for construction projects. Rule 1113 requires reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for flat coatings to 50 grams per liter (g/L) which began in July 2008. Additional details regarding these rules and other potentially applicable rules are presented as follows.

#### *Rule 403 (Fugitive Dust)*

This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and prohibits all forms of visible particulate matter from crossing any property line. This may include application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

#### *Rule 403.1 (Supplemental Fugitive Dust Control Requirements For Coachella Valley Sources)*

This rule requires the reduction or prevention of the amount of PM10 emitted in the ambient air from man-made fugitive dust sources. The provisions of this rule are supplemental to Rule 403 and apply only to fugitive dust sources in the Coachella Valley. In addition, this rule requires a fugitive dust control plan for construction projects with a disturbed surface area of more than five thousand (5,000) square feet.

#### *Rule 1113 (Architectural Coatings)*

This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

#### *Rule 1121 (Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters)*

This rule prescribes NOx emission limits for natural gas-fired water heaters with heat input rates less than 75,000 British Thermal Unit (BTU) per hour. It applies to manufacturers, distributors, retailers, and installers of natural gas-fired water heaters. In lieu of meeting these NOx limits, this rule allows emission mitigation fees to be collected from water heater manufacturers to fund stationary and mobile source

emission reduction projects targeted at offsetting NOx emissions from water heaters that do not meet Rule 1121 emission standards.

### *Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters)*

This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

### *Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations)*

This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

## *SCAQMD Air Quality Analysis Guidance Handbook*

In 1993, SCAQMD prepared its *CEQA Air Quality Handbook* to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA. However, SCAQMD is in the process of developing its *Air Quality Analysis Guidance Handbook* to replace the *CEQA Handbook*. The *CEQA Handbook* and the *Air Quality Analysis Guidance Handbook* describe the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents. The *Air Quality Analysis Guidance Handbook* provides the most up-to-date recommended thresholds of significance in order to determine if a project will have a significant adverse environmental impact. Other important subjects covered in the *CEQA Handbook* and the *Air Quality Analysis Guidance Handbook* include methodologies for estimating project emissions and mitigation measures that can be implemented to avoid or reduce air quality impacts. Although the Governing Board of SCAQMD has adopted the *CEQA Handbook* and is in the process of developing the *Air Quality Analysis Guidance Handbook*, SCAQMD does not, nor does it intend to, supersede a local jurisdiction's CEQA procedures.

While the *Air Quality Analysis Guidance Handbook* is being developed, supplemental information has been adopted by SCAQMD. These include revisions to the air quality significance thresholds and a procedure referred to as "localized significance thresholds," which has been added as a significance threshold under the Local Significance Threshold (LST) Methodology. The applicable portions of the *CEQA Handbook*, the *Air Quality Analysis Guidance Handbook*, and other revised methodologies were used in preparing the air quality analysis in this Section, as discussed and referenced later in this Section.

Chapter 7.01 (*Control of PM10, Fugitive Dust and Other Emissions*) of the Rancho Mirage Municipal Code establishes the minimum requirements for construction and demolition activities and other specified sources in order to reduce man-made fugitive dust and the corresponding PM10 emissions. The

corresponding performance standards are based upon the methodologies included in the Coachella Valley Dust Control Handbook, which has been prepared in accordance with SCAQMD Rule 403 and 403.1.

Appropriate air quality measures to prevent fugitive dust are required by the City's Fugitive Dust Control ordinance and plan implementation requirements, which are consistent with SCAQMD Rules 403 and 403.1 that apply to the Coachella Valley strategy for reducing fugitive dust emissions. Under the City's dust control regulations, a Local Air Quality Management Plan (LAQMP) must be prepared and approved prior to any grading, earth-moving, demolition, or building operation with a disturbed surface area of more than five thousand (5,000) square feet. Consistent with SCAQMD Rules 403 and 403.1, implementation of the Fugitive Dust Control Plan is required to occur under the supervision of an individual with training on Dust Control in the Coachella Valley. The plan will include methods to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. The most widely used measures include proper construction phasing, proper maintenance/cleaning of construction equipment, soil stabilization, installation of track-out prevention devices, and wind fencing.

## 4.2.4 Project Impact Analysis

### Thresholds of Significance

The following thresholds or criteria are derived from Appendix G of the CEQA Guidelines and are used to determine the level of potential effect. The significance determination is based on the recommended criteria set forth in Section 15064 of the CEQA Guidelines. For analysis purposes, buildout of the Porcupine Creek Retreat would have a significant effect on air quality emissions if it is determined that the project will:

a. Conflict with or obstruct implementation of the applicable air quality plan?
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
c. Expose sensitive receptors to substantial pollutant concentrations?
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

### Methodology

In November of 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) Version 2016.3.2. CalEEMod serves as a statewide platform to calculate criteria air pollutants and greenhouse gas emissions from construction and operation

aspects of land development projects. CalEEMod utilizes widely accepted methodologies for estimating emissions. Sources of these methodologies and default data include but are not limited to the United States Environmental Protection Agency (USEPA) AP-42 emission factors, California Air Resources Board (CARB) vehicle emission models, studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. In addition, some local air districts provide customized values for their default data and existing regulation methodologies for use for projects located in their jurisdictions.

Construction emissions resulting from project implementation account for the demolition, site preparation, grading, building construction, paving, and architectural coating (painting) stages in order to construct 27 additional studio, single-bedroom, and multi-bedroom units ("keys") for a total of 50 keys, which will not to exceed a total of 180,000 square feet for the site; retreat accessory and support facilities not to exceed a total of 70,000 square feet for the site; and associated pavement and hardscape improvements estimated at an added 100,000 square feet. The relatively minor modifications to the existing golf course and other estate facilities are not anticipated to generate meaningful quantities of construction emissions, and therefore, are not factored into these calculations, but existing uses have been accounted for in the operational emissions subsequently described in order to conservatively evaluate the project's potential air quality impacts.

Site preparation and grading activities produce fugitive dust emissions ($PM_{10}$ and $PM_{2.5}$) from soil-disturbing activities. Exhaust emissions from construction activities on site would vary daily as construction activity levels change. Short-term emissions of criteria air pollutants (e.g., CO, SOx, $PM_{10}$, and $PM_{2.5}$) generated by construction and ozone precursors (e.g., VOCs and NOx) were assessed in accordance with SCAQMD-recommended methods. These emissions were modeled using the CARB-approved CalEEMod computer program as recommended by SCAQMD. CalEEMod is designed to model construction emissions for land use development projects and allows for the input of project-specific information. Construction of the Plan must comply with SCAQMD rules. The emission calculations take into account compliance with Rule 403 and 403.1, and with Chapter 7.01 (Control of PM10, Fugitive Dust and Other Emissions) of the Rancho Mirage Municipal Code, by incorporating the watering of exposed surfaces and unpaved roads three times daily, reducing speed on unpaved roads to less than 15 mph, and sweeping loose dirt from access roadways. The dust control measures are designed to prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line. CalEEMod also incorporates Rule 1113 by reducing the VOC content in the area coatings. Adherence to the above-noted rules and regulations is not deemed a form of mitigation.

Input for operational emissions relied on the buildout conditions resulting from Specific Plan implementation, including the existing golf course facility, 50 studio, single-bedroom, and multi-bedroom units; retreat accessory and support facilities not to exceed a total of 70,000 square feet for

the site; and associated pavement and hardscape improvements estimated at an added 100,000 square feet.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities associated with the uses that would be permitted by the project. Source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the project site. Project-generated, regional area and mobile-source emissions of criteria air pollutants and ozone precursors were also modeled using the CalEEMod computer program. CalEEMod allows land use selections that include project location specifics and trip generation rates. CalEEMod accounts for area-source emissions from the use of natural gas, landscape maintenance equipment, and consumer products and from mobile-source emissions associated with vehicle trip generation. The analysis of daily operational emissions associated with the project have been prepared using the data and methodologies identified in SCAQMD's *CEQA Air Quality Handbook* and current motor vehicle emission factors in CalEEMod. Trip rates for these land uses were obtained from the Traffic Study for the project.

## Project Impacts

### *a. Conflict with or obstruct implementation of the applicable air quality plan?*

Under CEQA, a significant air quality impact could occur if the project is not consistent with the applicable Air Quality Management Plan (AQMP) or would obstruct the implementation of the policies or hinder reaching the goals of that plan. The proposed project site is located within the Salton Sea Air Basin (SSAB) and will be subject to SCAQMD's 2016 Air Quality Management Plan (2016 AQMP), released in March of 2017 to continue serving as a regional blueprint for achieving the federal air quality standards. The 2016 AQMP includes the most current strategies to meet the air quality standards and ensure that public health is protected to the maximum extent feasible. It also includes a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is updated with the latest data and methods.

Moreover, the project is subject to the regulations and measures originating from the 2003 Coachella Valley PM10 State Implementation Plan (2003 CV PM10 SIP), which is designed to address the region's serious nonattainment area for $PM_{10}$ (particulate matter with an aerodynamic diameter of 10 microns or less).

The Porcupine Creek Retreat Specific Plan proposes the redevelopment of the property from an existing private estate to an exclusive commercially operated retreat, all occurring within the current 191-acre Porcupine Creek Retreat Specific Plan property. The City of Rancho Mirage utilizes a single map to illustrate the General Plan land use and zoning. Density and intensity standards are consistent in both the General Plan and Zoning Code. The General Plan and Zoning designation for the property is presently classified as Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage

Channels (OS-W), and Mountain Reserve (MR). Project implementation includes a General Plan Zoning Map Amendment, resulting in a re-designation of the project site from R-L-2, OS-PV, OS-W, and MR to "Specific Plan" with and underlaying designation of Resort Hotel (Rs-H). Within the Specific Plan land use designation, the project proposes two basic land uses: Estate/Retreat and Flood Control Channel. As proposed, the Porcupine Creek Retreat Specific Plan is deemed consistent with the policies in the City's General Plan policies related to intent and use of specific plans.

The 2016 AQMP is a comprehensive plan that establishes control strategies and guidance on regional emission reductions for air pollutants base, in part, on the land use plans of the jurisdictions in the region. Being that the Porcupine Creek Retreat Specific Plan is consistent with the City's General Plan policies, it is therefore expected that the project will result in emissions consistent with those factored in the 2016 AQMP.

The proposed project would be implemented in accordance with all applicable air quality management plans to ensure any impacts to air quality are mitigated. Actions include, but are not limited to, the preparation and enforcement of any required dust control management plan in compliance with the CVSIP, SCAQMD Rule 403 and 403.1, and Chapter 7.01 (*Control of PM10, Fugitive Dust and Other Emissions*) of the Rancho Mirage Municipal Code. Compliance with the dust control standards will prevent sediment track-out onto public roads, prevent visible dust emissions from exceeding a 20-percent opacity, and prevent visible dust emissions from extending more than 100 feet (vertically or horizontally from the origin of a source) or crossing any property line.

In summary, the proposed project is consistent with the assumptions underlying the AQMP and the 2003 Coachella Valley PM10 State Implementation Plan and will not conflict with or obstruct implementation of the applicable air quality plan. No impact is anticipated.

### *b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The California Emissions Estimator Model (CalEEMod), version 2016.3.2, was used to estimate potential air pollutant emissions associated with the proposed project. The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause regional and/or localized exceedances of the federal and/or state ambient air quality standards, such as the NAAQS and CAAQS. To assist lead agencies in determining the significance of air quality impacts, SCAQMD has established suggested short-term construction-related and long-term operational impact significance thresholds for direct and indirect impacts on air quality. **Table 4.2.2, *SCAQMD's Air Quality Significance Thresholds,*** displays the established construction and operational daily significance thresholds to which the air emissions results are measured against. The project-specific construction and operational emissions results are subsequently analyzed and quantified.

**Table 4.2.2 SCAQMD's Air Quality Significance Thresholds (Pounds/Day)**

| Emission Source | CO | VOC | $NO_x$ | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Construction or Operation | 550 | 75 | 100 | 150 | 150 | 55 |

*Source:* South Coast AQMD Air Quality Significance Thresholds, April 2019

## Project-Related Construction Emissions

Construction emissions resulting from project implementation account for the demolition, site preparation, grading, building construction, paving, and architectural coating (painting) stages in order to construct studio, single-bedroom, and multi-bedroom units not to exceed a total of 180,000 square feet for the site; retreat accessory and support facilities not to exceed a total of 70,000 square feet for the site; and associated pavement and hardscape improvements estimated at an added 100,000 square feet. The relatively minor modifications to the existing golf course and other estate facilities are not anticipated to generate meaningful quantities of construction emissions, and therefore, are not factored into these calculations, but existing uses have been accounted for in the operational emissions summarized in **Table 4.2.3*, Summary of Long-Term Operational Emissions.***

The following table describes pollutant emissions during construction of the proposed project. Data represent maximum daily emissions expected during the period of construction. CalEEMod assumes a continuous period of construction using industry standard phases in chronological and order proportional to the size of the project.

**Table 4.2.3 Summary of Short-Term Construction Emissions (Pounds/Day)**

| Emission Source | ROG/VOC | $NO_x$ | CO | SO2 | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Peak Daily Emissions Resulting from Demolition, Site Preparation, Grading, Building Construction, Paving, and Architectural Coating | 47.2770 | 40.5347 | 22.0728 | 0.0467 | 10.5397 | 6.5419 |
| **SCAQMD Threshold** | **75** | **100** | **550** | **150** | **150** | **55** |
| **Threshold Exceeded** | **No** | **No** | **No** | **No** | **No** | **No** |

*Source: CalEEMod Version 2016.3.2. Refer to Appendix B of this DEIR for detailed tables.*
Note: Ozone (O3) precursors are represented under the ROG and VOC emissions category. PM10 and PM2.5 emissions are based on the CalEEMod results that factor the required compliance with SCAQMD Rule 403 and 403.1 and Chapter 7.01 of the Rancho Mirage Municipal Code pertaining to fugitive dust control.

As shown in **Table 4.2.3, *Summary of Short-Term Construction Emissions,*** above, SCAQMD daily thresholds for CO, NOx, ROG, SOx, PM10 and PM2.5 will not be exceeded during construction of the proposed project. As a standard requirement, construction activities resulting in a disturbed surface area of more than five thousand (5,000) square feet will be subject to the measures of a City-approved Local

Air Quality Management Plan (LAQMP) for dust control. The mandates and performance standards for construction-related dust control, to be followed in the LAQMP, are regulated in Chapter 7.01 (Control of PM10, Fugitive Dust and Other Emissions) of the Rancho Mirage Municipal Code, SCAQMD Rule 403 and 403.1, and in 2003 Coachella Valley PM10 State Implementation Plan. Therefore, dust control practices are not deemed mitigation under this methodology.

## Project-Related Operational Emissions

Operational emissions are those generated over the life of the proposed project, including area, energy, and mobile sources. Area sources include consumable products, such as building maintenance and cleaning supplies, kitchen and restroom supplies, pavement off-gassing, and periodic reapplication of architectural coatings. Energy sources include the direct and indirect use of fossil fuels for energy, including natural gas and electricity use in buildings, parking lot lighting, ventilation equipment, and elevators. Mobile emissions are generated by motor vehicle trips consistent with the transportation analysis provided in this document.

**Table 4.2.4 Summary of Long-Term Operational Emissions (Pounds/Day)**

| Emission Source | ROG/VOC | $NO_x$ | CO | SO2 | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Area | 5.5348 | 0.0002 | 0.0243 | 0.0000 | 0.0001 | 0.0001 |
| Energy | 0.3462 | 3.1470 | 2.6435 | 0.0189 | 0.2392 | 0.2392 |
| Mobile | 0.5316 | 3.1707 | 6.5252 | 0.0296 | 2.3054 | 0.6273 |
| Total | 6.4126 | 6.3179 | 9.1930 | 0.0485 | 2.5446 | 0.8666 |
| SCAQMD Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded** | **No** | **No** | **No** | **No** | **No** | **No** |

*Source: CalEEMod Version 2016.3.2. Refer to Appendix B of this DEIR for detailed tables.*
Note: Ozone (O3) precursors are represented under the ROG and VOC emissions category.

As shown in **Table 4.2.4, *Summary of Long-Term Operational Emissions***, operational emissions from buildout conditions will not exceed SCAQMD thresholds for any criteria pollutant, and impacts will be less than significant without the need for mitigation measures.

As shown in **Tables 4.2.3** and **4.2.4**, the project will not exceed criteria pollutant emissions thresholds as a result of construction and operation of the proposed project. The air quality standards and regulatory framework stem from the Clean Air Act, which identified the primary standards to provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Ambient air quality standards, their attainment and maintenance were based on criteria to protect public health. Secondary standards provide public welfare protection, including protection

against decreased visibility and damage to animals, crops, vegetation, and buildings. As such, compliance with the established regional and localized thresholds during construction and operation are consistent with the objective of protecting public health and welfare.

The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM10 and ozone. As shown in the tables above, project-related $PM_{10}$ emissions are projected to be below established SCAQMD thresholds after implementing the required dust control measures. Therefore, the proposed project will result in incremental, but not cumulatively considerable impact on regional PM10 levels. CO, NOx, and ROG are precursors to ozone, for which the Coachella Valley is in non-attainment. The project will not exceed thresholds for these pollutants and will not result in a cumulatively considerable impact on regional ozone levels. It is worth noting that SCAQMD deems that local sources of air pollution generated in the Coachella Valley have a limited impact on ozone levels compared to the transport of ozone precursors generated in SCAB.

Pertaining to cumulatively considerable net increases of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, less than significant impacts are anticipated.

### *c. Expose sensitive receptors to substantial pollutant concentrations*

A sensitive receptor is a person in the population who is particularly susceptible (i.e. more susceptible than the population at large) to health effects due to exposure to an air contaminant. Sensitive receptors and the facilities that house them are of particular concern if they are located in close proximity to localized sources of carbon monoxide, toxic air contaminants, or odors. Land uses considered by the SCAQMD to be sensitive receptors include residences, long-term health care facilities, schools, rehabilitation centers, playgrounds, convalescent centers, childcare centers, retirement homes, and athletic facilities. The surrounding context of the project includes vacant lots, office uses, and residential uses. Construction-related emissions resulting from the project are not expected to reach or exceed the SCAQMD regional thresholds of significance and therefore would not expose sensitive receptors to substantial pollutant concentrations at a regional level.

The South Coast Air Quality Management District (SCAQMD) has developed and published the Final Localized Significance Threshold (LST) Methodology to help identify potential impacts that could contribute to or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). LST methodology was developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. The purpose of analyzing LSTs is to determine whether a project may generate significant adverse localized air quality impacts in relation to the nearest exposed sensitive receptors, such as schools, churches, residences, hospitals, day care facilities, and elderly care facilities. LST thresholds represent the maximum emissions from a project that will prevent an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into

consideration ambient concentrations in each source receptor area (SRA), project, size, and distance to the sensitive receptor. Therefore, complying with the lowest allowable emissions thresholds translates to meeting the most stringent air quality standards for a project locality.

As part of the LST methodology, SCAQMD has divided its jurisdiction into 37 source receptor areas (SRAs) which can be used to determine whether a project may generate significant adverse localized air quality impacts. The proposed development is located in SRA 30, which covers the Coachella Valley and City of Rancho Mirage. LSTs only apply to certain criteria pollutants: carbon dioxide (CO), oxides of nitrogen ($NO_x$) particulate matter equal to or less than 10 microns in diameter ($PM_{10}$), and particulate matter equal to or less than 2.5 microns in diameter ($PM_{2.5}$).

Geographic Information Systems (GIS) mapping analysis was used to delineate the project area and identify the nearest sensitive receptors using the distance intervals established by the LST methodology, which are 25 meters (82 feet), 50 meters (164 feet), 100 meters (328 feet), 200 meters (656 feet), and 500 meters (1,640 feet). The project site surroundings include vacant hillside terrain to the north, west and south; while existing uses to the east include Rancho Mirage Elementary School and residential uses. As such, the existing school and residential structures serves as the basis for the LST analysis using the shortest distance interval of 25 meters (82 feet). The shortest distance interval to the nearest sensitive receptor establishes the strictest threshold with the lowest emissions allowances needed to maintain compliance. The LST analysis results are subsequently quantified and discussed.

**Table 4.2.5 Summary of Short-Term Construction Emissions in Relation to Localized Significance Thresholds (LSTs) (Pounds/Day)**

| Emission Source | $NO_x$ | CO | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|
| Maximum Unmitigated Emissions Resulting from Site Preparation, Grading, Building Construction, Paving and Architectural Coating (Rounded Value) | 40.5347 | 22.0728 | 10.5397 | 6.5419 |
| SCAQMD LST Threshold for SRA 30 | 304 | 2,292 | 14 | 8 |
| **LST Threshold Exceeded?** | **No** | **No** | **No** | **No** |

*Sources: AQMD LST Look-Up Tables corresponding SRA 30, 5-acre increment, at 25 meters (82 feet). CalEEMod Version 2016.3.2. Refer to Appendix B of this DEIR for detailed tables.*
Note: PM10 and PM2.5 emissions are based on the CalEEMod results that factor the required compliance with SCAQMD Rule 403 and 403.1 and Chapter 7.01 of the Rancho Mirage Municipal Code pertaining to fugitive dust control.

The results provided in **Table 4.2.5, *Summary of Short-Term Construction Emissions in Relation to Localized Significance Thresholds***, demonstrate that the construction activities would not generate emissions in excess of the site-specific LSTs; therefore, site- specific impacts during construction of the project would be less than significant without the need for mitigation. As noted above, project construction would require the implementation of an LAQMP, which would establish temporary wind screening, soil stabilization, and other measures to prevent fugitive emissions of particulate matter.

Because the proposed land uses do not include major stationary polluters (such as a landfill, chemical plant, oil field, refineries etc.), LST analysis was not conducted or required for project operation. Therefore, impacts to sensitive receptors from project construction will be less than significant.

### *d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?*

Implementation of the proposed retreat is not expected to result in emissions that would exceed the South Coast AQMD Air Quality Significance Thresholds pertaining to construction or operation. Moreover, the project emissions would not exceed the Localized Significance Thresholds applicable to the project setting in relation to the existing residences near the project.

The proposed project has the potential to result in short-term odors associated with operation of heavy equipment during grading, excavation, and other construction activities. However, construction-related odors would be temporary and quickly dispersed below detectable levels as distance from the construction area increases.

The proposed project will not include the types of facilities commonly known to generate odors, such as agricultural activities, feedlots, wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, or food packaging facilities. Moreover, such odors would be inconsistent with the ambiance required for successful operation of an exclusive, retreat. As such, the project is not expected to result in odor emissions adversely affecting nearby neighbors. Pertaining to other emissions adversely affecting a substantial number of people, less than significant impacts are anticipated.

## 4.2.5 Cumulative Impacts

Using the most current California Emissions Estimator Model (CalEEMod, Version 2016.3.2) computer software, the project-specific construction and operational emissions have been quantified and evaluated against the localized and regional air quality standards, which have been established with the purpose of protective public health and sensitive populations. The expected emissions will not exceed the applicable thresholds for criteria pollutants, including $PM_{10}$ and ozone precursors.

The Coachella Valley portion of the Salton Sea Air Basin (SSAB) is deemed to be in nonattainment for the 1997 8-hour ozone standard. Coachella Valley is unique in its geography due to its location downwind from the South Coast Air Basin (SCAB). As such, when high levels of ozone are formed in the South Coast Air Basin, they are transported to the Coachella Valley. Similarly, when ozone precursors such as nitrogen oxides (NOx) and volatile organic compounds (VOCs) are emitted from mobile sources and stationary sources located in the South Coast Air Basin, they are also transported to the Coachella Valley. SCAQMD has deemed that local sources of air pollution generated in the Coachella Valley have a limited impact on ozone levels compared to the transport of ozone precursors generated in SCAB. SCAQMD continues to reduce ozone and improve air quality in the Coachella Valley, in part by providing more than $50

million in grant funding towards paving dirt roads and parking lots, clean energy projects and cleaner vehicles. Future emission reductions anticipated to occur in the South Coast Air Basin associated with current and planned regulations on mobile and stationary sources are expected to contribute to improvements in ozone air quality in the Coachella Valley and lead to attainment of the standard. By resulting in ozone precursor emissions below the established thresholds, the project preventing a condition which would impair the region's ability toward attainment or one which would result in cumulative considerable exceedances.

Regarding the $PM_{10}$ nonattainment status, the construction and operational emissions will also not reach or exceed the established standards. Project-related construction activities would take place within the required mandates and measures aimed at prohibiting fugitive dust. The required plan preparation and demonstrated compliance will be consistent with Chapter 7.01 (*Control of PM10, Fugitive Dust and Other Emissions*) of the Rancho Mirage Municipal Code, which is enacted to establish the minimum requirements for construction and demolition activities and other specified sources in order to reduce man-made fugitive dust and the corresponding PM10 emissions. The corresponding performance standards are also based upon the methodologies included in the Coachella Valley Dust Control Handbook, which has been prepared in accordance with CVSIP and SCAQMD Rule 403 and 403.1 referenced above. As such, the project is not expected to impair the region's ability to progress toward attainment or to result in cumulatively considerable exceedances for this pollutant. As such, the project is not expected to result in cumulative impacts to air quality.

### 4.2.6 Mitigation Measures

No Mitigation Measures are required.

### 4.2.7 Level of Significance After Mitigation

The aspect of air quality does not involve significant impacts requiring mitigation.

### 4.2.8 Resources

1. Analysis of the Coachella Valley PM10 Redesignation Request and Maintenance Plan, by the California Air Resources Board, February 2010; and sections of the SCAQMD Rule Book.
2. Final 2016 Air Quality Management Plan (AQMP), by South Coast Air Quality Management District (SCAQMD), March 2017.
3. Final 2003 Coachella Valley PM10 State Implementation Plan (CVSIP), by SCAQMD, August 2003.

# 4.3 Biological Resources

## 4.3.1 Introduction

Descriptions and analysis in this section are based on information contained in the *Porcupine Creek Biological Resources Report* prepared by James W. Cornett (June 2020), the City of Rancho Mirage *Comprehensive General Plan Chapter 5 Conservation and Open Space*, and the *Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan* (CVMSHCP). This section discusses the biological resources that may be present in the project site or in the vicinity and assesses impacts on these resources from the development associated with implementation of the Porcupine Creek Specific Plan. The biological report is included in the Appendices of this Draft EIR (**Appendix C**).

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with biological resources at the project property. The Porcupine Creek Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to public services in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc. through direct removal, filling, hydrological interruption or other means;*

- The project site has been fully impacted by development and does not contain federally protected wetlands, marshes, or other natural drainage features. No blue-line stream corridors (streams or dry washes) are shown on U.S. Geological Survey maps for the project site and there are no botanical indicators of such corridors. As a result, implementation of the proposed project would not result in the direct removal, filling or other hydrological interruption to any of these resources.

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

- The project's existing development and immediately surrounding residential and public uses (hiking trail, public park and elementary school), do not present ideal conditions for wildlife corridors or native wildlife nursery sites. The projects eastern boundary is separated from the Santa Rosa Mountains by a flood control channel and a paved road. A sheep fence has also been erected to protect the Big Horn Sheep by preventing any access to the property, and no development activities will occur outside the existing fencing.

*Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance;*

- The project lies within the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) which outlines policies for conservation habitats and natural communities and is implemented by the City of Rancho Mirage. The project is consistent with the Goals and Policies set forth in the City of Rancho Mirage General Plan Open Space, Conservation Element and municipal code provisions, and will comply with the CVMSHCP. There are no other unique local policies or ordinances protecting biological resources that would cause a conflict.

*Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

- The City of Rancho Mirage is a participant of the CVMSHCP. This plan outlines policies for conservation habitats and natural communities and is implemented by the City of Rancho Mirage. The project site lies within the CVMSHCP and is not in a designated Conservation Area of the plan. However, the site is immediately adjacent to the Santa Rosa and San Jacinto Mountains Conservation Area of the CVMSHCP. The plan stipulates land use guidelines for projects within and adjacent to Conservation Areas. All Plan guidelines would continue to be adhered to.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Section 9** for a glossary of terms, definitions, and acronyms used in this Draft EIR.

## 4.3.2 Existing Conditions

The project site is fully developed with a private estate, golf course, and other various private recreational amenities. The site is approximately 191-acres out of the 230-acre Porcupine Creek estate property. 160-acres of the property have been completely disturbed since it was initially entitled and constructed in 1997. The additional 70-acres remains as undeveloped rocky hillside habitat. Rancho Mirage Elementary School is located adjacent to the property's northern corner, and single-family residential forms the sites eastern boundary.

### Physical Features

The project site sits on an alluvial fan and rocky hillsides of the Santa Rosa Mountains. Site elevations range from approximately 300 feet above sea level along the eastern edge of the property rising to 960 feet near the site's southern edge. A bighorn sheep barrier fence surrounds the entire 230-acre property.

There are no natural springs or water sources on or near the project site. A blue-line stream course; as shown on the Rancho Mirage U.S. Geological Survey (USGS) map, traverses the western border of the site. However, the blue-line stream was completely removed from the confines of the property. The

wash course was channelized with concrete walls in 1986 where it meets the western border of the project site. No other blue-line stream courses are shown on the USGS topographic map.

Desert Dry Wash Woodland habitat occupies three drainages and are considered poorly represented since none of the four tree species (smoke tree, palo verde, ironwood or desert willow) occur naturally within the project.

## Climate

The project site lies within a geographical region known as the Colorado Desert. As is typical of the desert region, annual precipitation is 4 to 5 inches per year in the City of Rancho Mirage. Winter temperatures are mild with a daily average of 71 degrees Fahrenheit. Winter nights occasionally drop to near freezing. The hottest days are experienced over the summer months with maximum daily temperature of 108 degrees Fahrenheit.

## Surrounding Lands

The Santa Rosa and San Jacinto Mountains Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) is to the north, west, and south of the project site. A concrete lined storm channel lies along the western boundary of the project site. The project site is located 0.50 miles southwest of Highway 111, and west of the Magnesia Falls Cove neighborhood. Rancho Mirage Elementary School is located adjacent to the property's northern corner, and single-family residential forms the sites eastern boundary.

## Field Surveys

Surveys were conducted in April and May of 2020. Specifically, biological surveys were conducted from April 22$^{nd}$ through April 30$^{th}$ and May 1$^{st}$ through May 24$^{th}$, and May 26, 2020. Night surveys were conducted on the evenings of April 24, 30, and May 17, 2020. The surveys took place in the spring following several months of above average precipitation and most if not all, ephemeral and perennial plant species and resident animal species would be observed or detected if present.

Animal surveys were conducted simultaneously with plant surveys. Additionally, 20-live animal traps (which capture animals unharmed) for large mammals were set around the project area for a 24-hour period. Invertebrate sampling was conducted with Bioquip light traps to attract and live capture flying insects.

Surveys were conducted by walking north-south transects at 10-yard intervals through the 71-acres of onsite natural landscapes in the southern portion of the Porcupine Creek estate, 150 yards outside of the bighorn barrier fencing surrounding the project site, and into the mouth of the Magnesia Spring Canyon. The developed areas of the property were also surveyed. East of the site are private residences and surveys could not be conducted in this area.

## Plant Survey Results

Two native plant communities were found within and near the project boundaries. The Sonoran Creosote Bush Scrub community, as defined by Holland (1986) and Sawyer and Keeler-Wolf (1995), was the dominant plant community on the undisturbed hillsides not just within the project boundaries but on the hillsides to the east, west and south beyond the project site boundaries as well. The second plant community found within project boundaries was the Desert Dry Wash Woodland. These native plants were found in three drainages within the project site as well as in drainages near the site boundaries to the east and west. The dry wash woodland was very poorly represented. Only three plant species, occasionally associated with the Desert Dry Wash Woodland community, were found: desert lavender (*Condea emoryi*), catclaw (*Senegalia greggii*) and cheesebush (*Ambrosia salsola*). None of the four tree species that best exemplify dry wash woodland—smoke tree (*Psorothamnus spinosus*), palo verde (*Parkinsonia florida*), ironwood (*Olneya tesota*) or desert willow (*Chilopsis linearis*) were present within the drainages. Outside of the project site boundaries three of the four trees species were found: smoke tree, desert willow and blue palo verde. The Desert Dry Wash Woodland is considered a sensitive community by the CVMSHCP and State of California.

## Special Status Plant Species

The inventory of Rare and Endangered Plants of California, published by the California Native Plant Society lists sixteen sensitive plant species that have been found in the region or that are know to occur in habitats similar to those found within the project area. The status of each of the sixteen species within and immediately adjacent to the project site is described below. The biological surveys and record check found no sensitive plant species that would be adversely impacted by the proposed project.

***The Salton milkvetch* (*Astragalus crotalariae*)** is a perennial herb found in the Sonoran Desert of California and Arizona. It is a rare plant usually encountered on sandy or gravelly soils below 1,000 feet in elevation. Parts of the project area conform to these criteria and may be considered possible habitat. However, no individuals or evidence of the Salton milkvetch were found. The Salton milkvetch is neither state nor federally listed.

***The pink fairy duster (Calliandra eriophylla)*** is a shrub belonging to the Pea Family. It is found in sandy or rocky soils below 5,000 feet in elevation. Portions of the site conform to these criteria and was initially considered to be possible habitat for the species. However, no individuals were found. The inability to detect this species resulted in the conclusion that it did not occur within the project area. The pink fairy duster is neither state nor federally listed.

***Borrego bedstraw, (Galium angustifolium borregoense)*** is a subspecies of the perennial and widespread narrow-leaved bedstraw, *Galium angustifolium.* No evidence of this subspecies was found within the project area. Normally the Borrego bedstraw is found in rocky areas similar to the habitat found along

the southern site boundaries. It would have been detected if present. The Borrego bedstraw has no federal status but is classified as rare by the state.

**Haydon's lotus, (*Lotus haydonii)*,** is a perennial herb placed in the Pea Family. It occurs in rocky areas at elevations several hundred feet above the highest point of the project site. For this reason, it was not expected in the project area and no evidence of its presence was found. Neither the state nor federal government has listed this species as rare, threatened, or endangered.

***The triple-ribbed milkvetch (Astragalus tricarinatus)*** is a perennial herb found in the northwestern Colorado Desert and south-central Mojave Desert. Very few individuals of this species have ever been discovered in the area. Those that have been encountered were found on rocky soils above one thousand feet in elevation. The project site nearly conforms to those criteria and was considered possible habitat for the species. However, no individuals of this species were found, and it was determined to not occur on or near the estate. The triple-ribbed milkvetch was officially listed as an endangered species on November 5, 1998.

***Ayenia (Ayenia compacta)*** is a perennial herb belonging to the Cacao Family. It is confined to rocky canyons below 1,500 feet within the Creosote Scrub Community. It could occur near the project area though no individuals were found. The inability to detect this species resulted in the conclusion that it did not occur on or adjacent to the estate. It is not given special status by the federal government though the California Native Plant Society considers it a rare species.

**Orcutt's woolly aster, (*Xylorhiza orcuttii),*** is a perennial herb placed in the Sunflower Family. It is found in Sonoran Desert Scrub habitat at elevations similar to those occurring in the project area. However, no evidence of this species was found during the surveys and it was concluded that it did not occur in the project area. Neither the state nor federal government has listed this species as rare, threatened or endangered.

***The winged cryptantha, Cryptantha holoptera),*** is an annual herb belonging to the Borage Family. It is found in areas of coarse sandy and rocky soils below 3,600 feet in elevation within the Creosote Scrub Community of the Colorado Desert. It could thus occur within the project area though no individuals were found. It is not given special status by the federal government, but the California Native Plant Society considers it a rare species.

***The glandular ditaxis, (Ditaxis clariana),*** is a perennial herb belonging to the Spurge Family. It is generally found below 500 feet on sandy flats within the Coachella Valley. No evidence of this species was found and the elevation and compacted and often coarse sands and gravels of the project area are considered unsuitable habitat for this species. It was concluded that it did not occur on or near the estate. The glandular ditaxis is not given special status by the federal government but is considered rare by the California Native Plant Society.

***The California ditaxis (Ditaxis californica)*** is a perennial herb belonging to the Spurge Family. It is believed to occur between elevations of 400 to 3,000 feet on coarse soils within the Creosote Scrub

Community of the Colorado Desert. It could thus occur within the project area though no individuals were found. It is not given special status by the federal government, but the California Native Plant Society considers it a rare species.

***Foxtail cactus, (Escobaria vivipara alversonii),*** is a stem succulent belonging to the Cactus Family. It is found on rocky soils below 3,000 feet in elevation within the Colorado Desert. It could thus occur within the project area though no individuals were found. It was concluded that it did not occur on or adjacent to the project site. Foxtail cactus is not given special status by the federal government but is considered rare by the California Native Plant Society.

***Parish's desert-thorn, (Lycium parishii****),* is a shrub belonging to the Nightshade Family. It is found on rocky slopes below 3,000 feet in elevation within the western Colorado Desert. It could thus occur in the project area though no evidence was found. It was concluded that Parish's desert-thorn did not occur within, or immediately adjacent to, the project boundaries. This species is not given special status by the federal government, though the California Native Plant Society considers it a rare species.

***Spearleaf, (Matelea parvifolia),*** is perennial herb belonging to the Milkweed Family. It is normally found at elevations below 3,000 feet in dry, rocky places within the Creosote Scrub Community of the Colorado Desert. It could thus occur in the project area though no individuals were found. Spearleaf is not given special status by the federal government but is considered rare by the California Native Plant Society.

***The slender-lobed four o'clock, (Mirabilis tenuiloba),*** is a perennial herb belonging to the Four O'clock Family. It is generally found in rocky areas below 1,600 feet in elevation within the western Colorado Desert. It could thus occur in the project area though no individuals were found. The slender-lobed four o'clock is not given special status by the federal government, though the California Native Plant Society considers it a rare species.

***Thurber's beardtongue, (Penstemon thurberi),*** is a perennial herb belonging to the Figwort Family. It is generally found on gravelly slopes below 4,000 feet in elevation within the Colorado Desert. It could thus occur in the project area though no evidence was found. Thurber's beardtongue is not given special status by the federal government, but is considered rare by the California Native Plant Society.

***Cove's cassia, (Senna covesii),*** is a perennial herb in the Legume Family. It is associated with dry washes below 2,000 feet in elevation within the Colorado Desert. It could occur in the project area though no individuals of this species were found. Cove's cassia is not given special status by the federal government, but is considered rare by the California Native Plant Society

## Wildlife Survey

The fauna of the project area is composed of species typical of the Colorado Desert when human activities and dwellings are in or near a project site. The biological surveys and records check did not find any sensitive or special status animal species within the fenced boundary of the project site. Wildlife species that were observed on the site are described below.

### *Invertebrates*

The invertebrates encountered during the field survey include the circus beetle (*Elodes armata), honeybee (Apis mellifera),* harvester ant *(pogonomyrmex californicus),* desert queen butterfly *(Danaus gilipus)* and house fly *(musca domestica).* Two species known to occur within the Coachella Valley are the Coachella giant sand treader cricket (*macrobaenetes valgum)* and the Coachella Valley Jerusalem cricket *(stenopelmatus cahuilaensis)*. These species have been placed on the California Department of Fish and Wildlife's (CDFW) Special Animal list. Neither of these species were encountered on the project site, likely due to unsuitable habitat. These species are commonly found in windblown sand deposits as opposed to the mostly coarse, compacted soils found on the project site.

The Casey's June beetle *(Dinacoma caseyi)* is listed by the U.S. Fish and Wildlife Service (USFWS) as endangered. It is not a covered species under the CVMSHCP. The beetle was not observed during any of the field surveys, nor was it expected since the beetle has not been found east of the westernmost portion of Cathedral City, located approximately 3 miles to the northwest. The project site is also not identified by the USFWS recommended survey area.

### *Reptiles and Amphibians*

Encountered reptile species included the desert iguana (*Dipsosaurus dorsalis*), desert spiny lizard (*Sceloporus magister*), side-blotched lizard (*Uta stansburiana*) and speckled rattlesnake (*Crotalus mitchellii*). Two lizard species of special concern to state and federal government agencies and known to occur within the Coachella Valley are the Coachella Valley fringe-toed lizard (*Uma inornata*) and flat-tailed horned lizard (*Phrynosoma mcalli*). These two species were not detected. Both species are restricted to areas of loose, windblown sand in the Coachella Valley. The absence of this habitat in or near the project site explains the absence of the two species.

The red-spotted toad (*Bufo punctatus*) and western toad (*Bufo boreas*) were the only two amphibian species recorded on the project site. No officially listed or candidate amphibian species are expected within, or near, the project area boundaries.

### *Desert Tortoise*

The desert tortoise *(Goperhus agassizi*) is an officially listed species by the USFWS. A clearance survey for the tortoise was conducted following the official protocol established by the USFWS. No observations or evidence of the desert tortoise was found on, or adjacent to, the project site. The extremely steep and rocky nature of large parts of the site, and existing development of the site, are the likely reasoning for the absence of the tortoise. As a result of the negative results, no further action regarding the desert tortoise is recommended.

### *Birds*

Birds that were regularly encountered on and adjacent to the project site were the mourning dove (*Zenaida macroura*), black-throated sparrow (*Amphispiza bilineata*), house finch (*Carpodacus mexicanus*), common raven (*Corvus corax*) and rock dove (*Columba livia*). An intensive effort was made to locate the burrowing owl (*Athene cunicularia*), a species protected under the Migratory Bird Treaty Act (MBTA) and not functionally covered under the CVMSHCP. Although this species typically nests on flat areas of friable soils, no observations of owls were recorded, and no evidence of the species' presence was found.

A concentrated effort was also made to locate the loggerhead shrike (*Lanius ludovicianus*), a Species of Special Concern in the State of California. The loggerhead shrike is not a covered species under the CVMSHCP. Though shrikes are known to inhabit many environments in and around the City of Rancho Mirage, no shrikes were observed, and no evidence of their presence was detected. Shrikes generally avoid areas of human habitation and are rare on steep, rocky sites. These are the likely reasons for the absence of this species.

Most migrating bird species are not covered under the CVMSHCP. The existing Porcupine Creek estate, with its abundance of trees and several ponds, is highly attractive to migrating birds. Dozens of migrant species were observed during the biological field survey.

### *Mammals*

Detected mammals within the project site boundaries included the canyon mouse (*Peromyscus crinitis*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), desert cottontail (*Sylvilagus audubonii*) and coyote (*Canis latrans*). Three special-status mammalian species were anticipated to occur in the project area, the Palm Springs pocket mouse (*Perognathus longimembris bangsi*), Coachella Valley ground squirrel (*Spermophilus tereticaudus chlorus*) and peninsular bighorn sheep (*Ovis canadensis cremnobates*). The Palm Springs pocket mouse is common and widespread in the Coachella Valley. However, no mice were detected or live trapped during the biological surveys. Nonetheless, the habitat is found to be suitable, and it could occur within the project area. The Palm Springs pocket mouse is not officially listed as threatened or endangered by state or federal governments. It is considered a Species of Special Concern by the State of California and is a covered species under the CVMSHCP.

The Palm Springs ground squirrel is a subspecies of the round-tailed ground squirrel, (*Spermophilus tereticaudus)*, and is a common and widespread species on the floor of the Coachella Valley. No individuals of the subspecies were detected or captured within the project area. The absence of this subspecies may be due to the higher number of the much larger competitor squirrel known as the Beechey ground squirrel (*Spermophilus beecheyi*). In the Coachella Valley, these two species are not normally found occupying the same habitat. The Palm Springs ground squirrel is not officially listed as threatened or endangered by state or federal governments and is a covered species under the CVMSHCP.

The desert kit fox (*Vulpes macrotis arsipus*) was not observed or detected on or near the project site. Areas of human development and pervasive rocky terrain are rarely occupied by this small carnivore. The desert kit fox is fully protected in California and is not a covered species under the CVMSHCP.

A fourth sensitive species, the San Diego Desert Woodrat, (*Neotoma lepida intermedia)*, is a state Species of Special Concern. It is known to occur in the extreme northwestern portion of the Coachella Valley. However, the subspecies of the woodrat found within the project boundaries is *Neotoma lepida lepida* which is not a Species of Special Concern.

### *Peninsular Bighorn Sheep*

The peninsular bighorn sheep is a subspecies of bighorn restricted to the desert slopes of the Peninsular Ranges of Southern California and Baja California. The population found in the United States is considered Endangered by the federal government and Threatened by the state government. No observations of bighorn or evidence of their presence were found within the 230-acre fenced area of the Porcupine Creek estate. In addition, no sheep have accessed the project site since the construction of the sheep fence in 2003. Bighorn observations on the rocky hillsides to the east, west and south of the project site were observed six times during the biological survey. Tracks, droppings, bighorn bed sites or other evidence of presence were found on most biological site visits beyond the fence. The high frequency of detection reflects, in part, the project site's maintenance of an artificial waterhole approximately one-half mile up Magnesia Spring Canyon from the project site. Bighorn tracks and droppings were found near the waterhole on every site visit.

### *Wildlife Corridors*

Wildlife corridors provide connectivity that allow animals to have a passageway to other natural open space areas. These corridors are often vegetation-based habitats that enable their movement and offer less risk of predation compared to travelling through open lands. Although no clear evidence of wildlife corridors was found on the project site, the multiple fence underpasses indicate that small- and medium-sized mammals regularly move from the project site into the natural landscapes that surround the site, and vice versa. The underpasses are much too small for bighorn sheep, even lambs, but do allow the passage of carnivores such as bobcats, coyotes, and gray foxes. All these predators were observed within the project site and feed on the unusually high density of Beechey ground squirrels and desert cottontails. To support the continued existence of increasingly rare predators such as bobcats and gray foxes, it is strongly recommended that these small underpasses be allowed to persist so long as they never exceed 18 inches in height.

## 4.3.3 Regulatory Setting

Federal, state, and local regulations pertaining to the biological resources are discussed below.

## Federal

### *Endangered Species Act*

The Endangered Species Act (FESA) of 1973 provides a program for the conservation and protection of endangered and threatened plants and animals and the habitats in which they are found. Section 7 of the ESA directs federal agencies to use their legal authorities to carry out conservation programs for listed species. It also requires these agencies to ensure that any actions they fund, authorize, or carry out are not likely to jeopardize the survival of any endangered or threatened species, or to destroy or adversely modify its designated critical habitat (if any) (USFWS 2020).

Additional protection is authorized by section 9 of the ESA, which makes it illegal to take, import, export, or engage in interstate or international commerce in listed animals except by permit for certain conservation purposes. "Take" is defined by the ESA as to harm, harass, wound, trap, collect, kill or the attempt to engage in such activity.

### *The Federal Migratory Bird Act*

Migratory Bird Treaty Act of 1918 (MBTA) governs the obligation of the United States under international treaties and conventions for the protection of migratory birds. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts and nests. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit by the Department of Interior U.S. Fish and Wildlife Service.

### *Clean Water Act*

The Clean Water Act (CWA) was established in 1972 as the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the EPA has implemented pollution control programs such as setting wastewater standards for industries. The EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

It is unlawful under the CWA to discharge any pollutant from a point source, which is a discrete conveyance such as pipes or man-made ditches, into navigable waters unless a permit is obtained. The National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Compliance monitoring under the NPDES Program encompasses a range of techniques in order to address the most significant problems and to promote compliance among the regulated community.

## State

### *California Endangered Species Act*

The California Endangered Species Act (CESA) enacted in 1970 and subsequently amended, conserves and protects plant and animal species at risk of extinction. The California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species (California Fish and Game Code Section 2070). CDFW also maintains a list of "candidate species," which are species formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. In addition, CDFW maintains lists of "species of special concern," which serve as "watch lists." Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present on the project site and determine whether the proposed project could have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any proposed project that may affect a candidate species.

### *California Fish and Game Code*

Under Sections 3503, 3503.5, and 3511 of the Californian Fish and Game Code (CFGC), it is unlawful to take, possess or cause destruction of birds, nests, and eggs. Fully protected birds may not be taken or possessed without a specific permit. Section 3505.3 protects all birds of prey and their eggs and nests against take, possession, or destruction of nests or eggs.

### *Native Plant Protection Act*

The Native Plant Protection Act (NPPA) enacted in 1977 and implemented by the California Department of Fish and Wildlife (CDFW), prohibits the killing or possession of California rare, threatened, or endangered plant species without authorization or permit by CDFW. All state department and governing agencies are required to use their authority to enforce conservation of rare or endangered plant species.

## Regional and Local

### *Habitat Conservation Plans*

Habitat Conservation Plans (HCPs) under section 10(a)(1)(B) of the ESA provide for partnerships with non-federal parties to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery. HCPs are planning documents required as part of an application for an incidental take permit. They describe the anticipated effects of the proposed taking; how those impacts will be minimized or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and non-listed species, including those that are candidates or have been proposed for listing. Conserving species

before they are in danger of extinction or are likely to become so can also provide early benefits and prevent the need for listing (USFWS 2020).

### *Coachella Valley Multiple Species Habitat Conservation Plan*

The Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) is a regional multi-agency conservation plan that provides for the long-term conservation of ecological diversity in the Coachella Valley region of Riverside County. Significant progress has been made in plan implementation since state and federal permits were issued in September and October 2008. The term of all HCP permits is 75 years, which is the length of time required to fully fund implementation of the CVMSHCP.

The CVMSHCP includes an area of approximately 1.1 million acres in the Coachella Valley region within Riverside County. The plan area boundaries were established to incorporate the watersheds of the Coachella Valley within the jurisdictional boundaries of CVAG and within Riverside County. Indian Reservation Lands are not included in the CVMSHCP although coordination and collaboration with tribal governments has been ongoing.

The Coachella Valley Conservation Commission (CVCC) is the agency responsible for CVMSHCP implementation. The CVCC is comprised of elected representatives of the Local Permittees including Riverside County, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage, the Coachella Valley Water District, Mission Springs Water District, and the Imperial Irrigation District. The Riverside County Flood Control and Water Conservation District (County Flood Control), Riverside County Regional Park and Open Space District (County Parks), and Riverside County Waste Resources Management District (County Waste) are also Local Permittees.

Other Permittees include three state agencies, the California Department of Parks and Recreation (State Parks), the Coachella Valley Mountains Conservancy (CVMC), and the California Department of Transportation (CalTrans). A major amendment to include the City of Desert Hot Springs and Mission Springs Water District as Permittees was approved by the CVCC in March 2014 and all local Permittees approved the Major Amendment in 2014. The US Fish and Wildlife Service (USFWS) approved the Major Amendment in December 2015. The final approval of the Major Amendment by California Department of Fish and Wildlife (CDFW) was in August 2016. The CVMSHCP involves the establishment of an MSHCP Reserve System to ensure the conservation of the covered species and conserved natural communities in perpetuity. The existing conservation lands managed by local, state, or federal agencies, or non-profit conservation organizations form the backbone of the MSHCP Reserve System (CVMSHCP Annual Report 2019).

## 4.3.4 Project Impact Analysis

### Thresholds of Significance

The thresholds used to evaluate potential impacts to biological resources are derived from Appendix G of the CEQA Guidelines. The significance determination is based on the recommended criteria set forth in Section 15064.5 of the CEQA Guidelines. For analysis purposes, development of the proposed project would have a significant effect on biological resources if it is determined that the project would:

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 U.S. 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, regulations or by the California Department of Fish and Wildlife Service?
c. Have a substantial adverse effect on state or federally protected wetlands (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?

Threshold topic “c through f”, are not analyzed further since screening criterion related to project biological resources concluded that there would be no impacts or less than significant impacts. See 4.4.1, *Introduction,* of this Biological Section.

### Methodology

Prior to the initiation of field work, literature and institutional records were reviewed to determine the biological resources that might exist within the general area and determine the possible occurrence of special status species. Records collection and or staff of the Coachella Valley Association of Governments and the Bighorn Institute were contacted for specific information as to the occurrence of sensitive species. The California Department of Fish and Game Natural Diversity Database was also consulted.

### Project Impact

### *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 U.S. Fish and Wildlife Service*

The proposed project will increase the density of human-occupied dwelling units and a minor intrusion into the 70-acres of natural landscape along the sites southern boundary may result in the loss of some native plant species and wildlife habitat. However, the biological report finds these changes to be insignificant and would have no negative impact upon the plant and animal species within the existing estate and in the surrounding Santa Rosa and San Jacinto Conservation Area. The biological surveys and records check found no sensitive plant species that would be adversely impacted by the proposed development of the project site.

Additionally, no birds, or mammals that are identified as a candidate or sensitive by any local, state, or government agency, were encountered or showed substantial evidence of occupied habitat on the proposed project site. Because site modifications would not extend beyond the project site boundaries, no impacts to the observed bighorn sheep existing in the surrounding hillsides are foreseen.

Although migratory bird species were frequently observed within and near the project site, no significant impacts are foreseen to these species since site modifications are contained to the existing site. For this reason, no additional surveys for burrowing owls or migratory bird species are recommended.

Development of the proposed retreat will comply with the City's landscape regulations and the CVMSHCP Land Use Agency Guidelines. The project will utilize native plant material and prohibit the use non-native plant materials that are harmful to native plant and animal species. Impacts to species identified as a candidate, sensitive, or special status species would be less than significant with the implementation of **Mitigation Measure BIO-1**.

### *b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife Service*

No riparian habitat or other sensitive natural communities were identified on the project site. There are no natural springs or water sources on or near the site. A blue-line stream course as shown in the U.S. Geological Survey map (USGS), traverses the western border of the site. The wash course was channelized with concrete walls in 1986 where it is offsite and adjacent to the western border of the project site. No other blue-line streams are shown on the USGS topography maps. Therefore, no significant impacts to any riparian habitat or other sensitive species would occur.

## 4.3.5 Cumulative Impacts

Implementation of the proposed project will not result in project-level effects to biological resources. However, when considered in combination with other cumulative development within the City and its Sphere of Influence, there is potential for adverse cumulative effects to biological resources. Environmental protection laws and regulations, have been applied with increasing rigor since the early 1970s and include the California Endangered Species Act, Federal Endangered Species Act, and the Clean Water Act, as described in the Regulatory Setting earlier in this EIR chapter. The City is also a permittee of the CVMSHCP.

The proposed project and other future projects within the City and its Sphere of Influence would be required to comply with local, state, and federal laws and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Additionally, future projects in the area would be mitigated through the payment of conservation fees implemented by the CVMSHCP. Therefore, with adherence to policies and programs as identified in this section, all new development within the proposed project will assist in minimizing cumulative impacts in regard to biological services and are expected to be less than significant.

## 4.3.6 Mitigation Measures

**BIO-1:** The project developer shall adhere to the CVMSHCP Conservation Area Land Use Adjacency Guidelines, listed below. This would include removing the existing oleanders within the fence line on the Porcupine Creek property, adjacent to the upper CVWD water tanks.

CVMSHCP Land Use Adjacency Guidelines for Projects Adjacent to Conservation Areas:

**4.5.1 Drainage**

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

**4.5.2 Toxics**

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

#### 4.5.3 Lighting

For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area.

#### 4.5.4 Noise

Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area.

#### 4.5.5 Invasives

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.

#### 4.5.6 Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

#### 4.5.7 Grading/Land Development

Slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

## 4.3.7 Level of Significance After Mitigation

With the implementation of **Mitigation Measure BIO-1** impacts to biological resources are reduced to less than significant.

## 4.3.8 Resources

1. Environmental protection Agency, May 2020 https://www.epa.gov/laws-regulations/summary-endangered-species-act, accessed May 2020
2. U.S. Fish and Wildlife Service, May 2020 https://www.fws.gov/endangered/what-we-do/hcp-overview.html, accessed May 2020.

3. Rancho Mirage 2017 General Plan, Chapter 5 Conservation and Open Space, accessed May and June 2020.
4. Coachella Valley Multiple Species Habitat Conservation Plan 2019 Annual Report, accessed June 2020.

# 4.5 Cultural Resources

## 4.5.1 Introduction

Descriptions and analysis in this section are based on information contained in the *Porcupine Creek Cultural Resources Study* prepared by Strategic Research, Inc. (June 2020), and the City of Rancho Mirage *Comprehensive General Plan Chapter 5 Conservation and Open Space Element*. This section discusses the cultural resources that may be present in the project site or in the vicinity and assesses impacts on these resources from the development associated with implementation of the Porcupine Creek Retreat Specific Plan. The cultural resources report is included in the Appendices of this Draft EIR (**Appendix D** *Cultural Resource Study*).

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with biological resources at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to public services in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Disturb any human remains outside, including those interred outside of formal cemeteries;*

- The project site has been previously disturbed, graded, and developed as residential estate and private golf course. The proposed project does not propose any development activities outside of the existing development footprint. Therefore, the project would not disturb any human remains, including those interred outside of formal cemeteries. Moreover, the project will comply with California Health and Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5, which require that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby reasonably suspected overlay remains, until the County Coroner has examined the remains.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.5.2 Existing Conditions

### Existing Conditions

The project area is located along the southern edge of the Coachella Valley, a low valley sandwiched between the Santa Rosa Mountains to the south and southwest and the Little San Bernardino Mountains to the north. The valley is part of the Colorado Desert geomorphic province, an area that includes both sides of the lower Colorado River and the Coachella and Imperial Valleys of California (Jenkins 1980). The mountain ranges surrounding the Coachella Valley are uplifted blocks of continental crust. The Santa Rosa Mountains are located at the northern end of the Peninsular Ranges, a series of mountain ranges running from the Los Angeles Basin southeast to the tip of the Baja Peninsula (Jahns 1954:3) that forms a natural border between the coastal areas to the west and the deserts to the east. The mountains are composed of plutonic intrusions that have been uplifted through tectonic activity.

The highest point is San Jacinto Mountain, at 3,307 m (10,849 feet), which towers above the present-day city of Palm Springs. The Little San Bernardino Mountains are part of the Transverse Ranges, a series of east–west-trending mountains that are similar in composition to the Peninsular Ranges and include large masses of Mesozoic-era plutonic rocks. The summits of the Transverse Ranges exceed 3,500 m (11,483 feet) at San Gorgonio Peak (Bailey and Jahns 1954).

Much of the valley bottom is at or below sea level, with the deepest areas dipping to 80 m (263 feet) below sea level. The project area is situated at an elevation of approximately 110 m (360 feet) above mean sea level. Both alluvial and aeolian sediments are present within the valley.

As previously discussed, the project site has been previously disturbed, graded, and developed as residential estate and private golf course.

## Cultural Setting

### *Prehistoric Period*

#### *The Paleoindian Period (12,000–8000 b.p.)*

Paleoindian period groups, probably with Clovis complex technology, occupied much of California beginning about 12,000 years ago. However, there is very little evidence of Paleoindian period occupation of the northern Coachella Valley. The reasons for this are unclear but may be related to a lack of habitat for the large game hunted by Clovis people.

Across much of western North America, the Clovis complex developed into the Western Stemmed Point tradition or Western Pluvial Lakes tradition after 10,000 b.p. (Bedwell 1973), probably in response to the warming and drying climate of the early Holocene. This tradition is characterized by crescents and large stemmed, shouldered, and lanceolate points (Willig and Aikens 1988:3). This cultural assemblage is commonly called San Dieguito in southern California and had an economy presumably based on the exploitation of marsh plants, fish, freshwater shellfish, and large and small game (Rogers 1966). Rogers had originally defined three distinct phases associated with the San Dieguito cultures, but further

excavations at the sites where he worked have failed to find evidence of these distinctions (Vaughan 1982; Warren 1967:171).

There is little evidence of a San Dieguito presence in the northern Coachella Valley, probably just a few "small, mobile bands exploiting small and large game and collecting seasonally available wild plants" (Schaefer 1994:63; see also Schaefer and Laylander 2007). The reasons for this are unclear, but the lack of an early occupation may indicate that Lake Cahuilla was not inundated during that time.

### *The Archaic Period (8000–1500 b.p.)*

Beginning about 8,000 years ago, the climate became hotter and drier, and it appears that the northern Coachella Valley was basically abandoned during that time (Schaefer 1994:64). At best, the record suggests only a minor occupation by relatively few people. When the climate began to cool, after about 4,000 years ago, during the Late Archaic period, it appears that the Colorado Desert was reoccupied (Love and Dahdul 2002; Schaefer 1994:64), and several archaeological sites in the northern Coachella Valley are dated to this time. It appears that, as with later occupations, much of the occupation centered on the shores of Lake Cahuilla. However, very little is known about overall Late Archaic period adaptations or social structure.

One of the best-documented Late Archaic period sites in the Colorado Desert is the Indian Hill Rockshelter near Anza-Borrego State Park (McDonald 1992; Wilke et al. 1986), located approximately 50 km south of the project area. Excavators found a number of rock-lined storage pits as well as hearths and Elko Eared projectile points. Radiocarbon dates from these levels indicated that they were occupied approximately 4,000 years ago. McDonald (1992) postulated that this was a base camp for hunter-gatherers who likely roamed over a large area in search of food. A rockshelter from Tahquitz Canyon also contained rock-lined pits and similar artifacts, but no radiocarbon dates were taken at the site; so, its true age is unclear (Schaefer 2002). Taken together, these sites suggest that people lived in highly mobile bands and took advantage of a variety of resources in the area.

Excavations at two sites near Desert Hot Springs located 20 km northwest of the project area (CA-RIV-1827 and CA-RIV-2642) encountered deposits dating to the transition from the Late Archaic period to the Late Prehistoric period, approximately 1200–1000 b.p. (Dahdul et al. 2008; Drover 1982, 1988; Hogan et al. 2010). These sites contained evidence of habitation, including hearth features; activity surfaces and a variety of artifact types, such as flaked stone debitage; faunal remains; and possible human remains. These sites are located adjacent to the ethnohistorically known Seven Palms Rancheria (CA-RIV-154), and it is likely that these sites represent an early occupation of the village.

### *The Late Prehistoric Period (1500–200 b.p.)*

Beginning about 1500 b.p., Yuman (or Patayan) agricultural groups along the Colorado River area began to influence Colorado Desert groups, particularly in the Coachella Valley. This Patayan pattern included a preceramic phase (Rogers 1945:170; Warren 1984; Waters 1982a, 1982b) and three ceramic phases,

Patayan I (ca. 1500–1000 b.p.), II (ca. 1000–500 b.p.), and III (after ca. 500 b.p.). After about 1000 b.p. (Patayan II), a number of cultural traits, including new ceramic types, small triangular points, and cremations, moved west from the Colorado River, either through diffusion or perhaps carried by some migrating Yuman people. Whichever the case, long-distance trade networks were established between the Coachella Valley and Colorado River.

Agricultural crops were also probably introduced into the area during this time. Along the Colorado River, domesticated crops constituted up to half of the diet of Yumans (Castetter and Bell 1951). Ethnographically (see below), the Cahuilla were known to have large, walk-in wells that could have been used in pot irrigation (Bean and Mason 1962), although small check dams and other simple irrigation technologies likely also were used (Wilke and Lawton 1975:28).

The Late Prehistoric period groups that occupied the Coachella Valley were the direct ancestors of the ethnographic Cahuilla. This period represents a significant increase in human occupation of the valley, and several large archaeological sites from the period have been identified (see Bean et al. 1995; Schaefer 1994; Sutton and Wilke 1988; Wilke 1978).

### *Ethnographic Period*

The aboriginal group that occupied the northern Coachella Valley during the historical period was the Desert Cahuilla, who, along with the Mountain and Pass Cahuilla, constituted the ethnographic Cahuilla. The Cahuilla spoke a language of the Takic branch of Northern Uto-Aztecan, and the Desert Cahuilla spoke a distinct dialect of Cahuilla. There have been few archaeological studies of the historical-period Cahuilla, but testing at the former Mission Creek Indian Reservation, approximately 35 kilometers or 22 miles northwest of the project site, identified occupations stretching from the Lake Prehistoric period into the early twentieth century. Similarly, excavations at Tahquitz Canyon, 12 kilometers or 7 miles west of project site, found a large village complex dating between 1600 and 1870.

The Cahuilla exploited a large amount of plant species with mesquite on the Coachella Valley floor as the primary food staple. The Desert Cahuilla also grew a few agricultural crops, namely corn, beans, and squash, which were probably obtained from native peoples along the Colorado River to the east. The Cahuilla also preferred a variety of animals including deer and mountain sheep to smaller animals such as rabbits and rodents. The Cahuilla population was originally as many as 3,000 people but declined rapidly after the smallpox and measles epidemic of 1863.

In 1876, the Agua Caliente Indian Reservation (Reservation) was founded by an Executive Order of President Ulysses S. Grant which was expanded in 1877 and 1907. The Reservation covers roughly 31,500 acres and consists of all even-numbered sections and all unsurveyed portions of Township 4 South, Ranges 4 and 5 East, and Township 5 South, Range 4 East, on the San Bernardino Meridian, with the exception of sections already given out by the United States (US) government. The odd-numbered sections had already been given to railroads as an incentive to develop cross-country rail lines, and as such, the Reservation appears as a checkerboard pattern on maps. In 1891, Congress passed the Mission

Indian Relief Act, which authorized allotments of Reservation land to be given to individuals. The allotment elections were finally approved by the Secretary of the Interior as part of the Equalization Act in 1959, which finalized the individual Indian allotments and set aside certain lands for Agua Caliente Tribal use and cemeteries.

### *Historic Period*

The extreme aridity of the Colorado Desert acted as a deterrent to many early explorers. The earliest recorded European visit to the Coachella Valley was in the winter of 1823–1824 by José Romero, the leader of an expedition attempting to reach the Colorado River by a new route (Bean and Mason 1962). Until the mid-nineteenth century, however, most nonnative forays into the area were confined to the established prehistoric trail systems. A number of those trails passed through the western Coachella Valley, including the important Cocomaricopa Trail, which connected Arizona with the cultures along the southern California coast (Bean and Vane 1995).

In 1853, William P. Blake described the Coachella Valley during the Pacific Railroad Survey expedition (Blake 1857). Blake recorded the general environment, noted the locations of Indian villages, described native agriculture in the valley, and recorded some oral traditions of the Indians concerning life around ancient Lake Cahuilla. In 1855 and 1856, the U.S. Land Office Survey surveyed the valley and divided it into townships and sections (Wilke and Lawton 1975).

The European settlement of the valley intensified after the completion of the Southern Pacific Railroad in 1877 (Heath 1945). In the 1880s, the Homestead Act and the Desert Land Act opened much of the public land in the area to private development. Farming was the primary economic activity in the valley, supported by a variety of wells that accessed sizable underground water resources. In 1948–1949, construction of the Coachella Canal supplied additional water to the valley. Much of the area to the east of the project area, in the area around the town of Indio, is still an important agricultural center. Vegetables, cotton, citrus, and particularly dates were, and still are, important cash crops.

The development of the state highway system in the early twentieth century opened the valley to further development. State Route 99 (now Varner Road) was completed through the area in 1912. The Coachella Valley became a popular vacation spot for the well-to-do in the Los Angeles Basin. Resorts and hotels, equestrian centers, and, by the mid-twentieth century, country clubs appeared throughout the valley. In particular, the Palm Springs area was made famous by Cary Grant, Bob Hope, and Lucille Ball, among others.

During the late twentieth century, development in the Coachella valley expanded rapidly, with scores of country clubs and housing developments appearing along U.S. Highway 111 and Interstate 10. The northern and eastern sides of the project area are surrounded by such developments. Native American-led development has also driven economic expansion in the valley, with several casino resorts, golf courses, and other developments present in the valley.

## Archaeological Resources

A records-search was conducted by SRI for the project area at the California Historical Resources Information System Eastern Information Center (EIC), Department of Anthropology, University of California, Riverside. The records search looked at all reports from previous archaeological surveys executed within a 1-mile radius of the project area. All previously recorded prehistoric cultural resources within a 1-mile radius and all historical-period resources within a 1/2-mile radius also were examined.

In addition to the research conducted at the EIC, archival studies were conducted at other libraries, research institutions, and government agencies. The information gathered at these repositories provided valuable information on both prehistoric and historical-period resources within the project area. Historical maps were consulted for information regarding specific historical-period land use in and around the project area. The online USGS Historical Topographic Map Collection and online BLM/U.S. General Land Office (GLO) records were consulted.

The results of the records search indicated that six previously conducted projects included work in portions of the project area. Of these, four were conducted in support of work associated with the West Magnesia Canyon Flood Control Channel), one was a survey and site evaluation for the Magnesia Falls Cove EIR, and one was mitigation of eight archaeological sites in support of a subsequent EIR to support permitting of the existing private estate and golf course. These studies included approximately 85 to 95 percent of the current project area.

A total of 13 prehistoric archaeological sites and 1 isolated artifact have been recorded within the current project boundaries. The archaeological sites within the current project boundaries consist of three ceramic scatters, four milling-feature sites, and six rock-cairn-alignment sites. The isolated artifact is a metate fragment. Only 1 previously recorded site, CA-RIV-3048, a small ceramic scatter, is located within the proposed development areas.

In addition to the 14 resources within the project area, another 27 cultural resources were recorded in the surrounding records-search buffer. In total, 15 historical-period built environment resources were identified within 1/2 mile of the project area. These include 12 houses, 1 structure that previously served as a post office, a commercial building, and an apartment building. Twelve prehistoric resources were recorded within 1 mile of the project area. These include 11 archaeological sites and 1 isolated artifact. The archaeological sites consist of 1 camp, 5 milling features, 3 rock-cairn-alignment sites, 1 site with rock-cairn alignments and possible trail, and 1 site of unknown site type.

SRI surveyed all undeveloped portions of the project area, checked the locations of previously recorded resources within the developed portions of the project area, and checked the proposed development areas to confirm that these are highly disturbed from previous construction. All of the 79.5 acres of the three undeveloped areas were surveyed, and areas of open ground surface in the seven proposed development areas were checked as well. These areas appear not to have been disturbed by any of the surrounding construction activities, with the exception of part of the western end of the project area,

where some of the area was disturbed by the construction of the flood control channel. The seven development areas were covered extensively by vegetation and other landscaping. SRI determined from an analysis of aerial photographs and inspections of the visible ground surface; the entire area of the golf course has been extensively altered during construction. Any archaeological sites within the golf course would have been destroyed during its construction, and if any subsurface deposits were present, they were likely also destroyed.

The results of the records search and fieldwork performed by SRI identified thirteen previously recorded prehistoric archaeological sites in the overall project area. Six of these sites were not relocated. One of these six sites (RIV-3048) was previously recorded in a proposed development area, but this site was destroyed during construction of the golf course, and no other known cultural resources are located in the proposed development areas. The other five sites that could not be relocated were also destroyed by the construction of the golf course. SRI relocated and documented seven of the thirteen previously recorded sites. Each of these rerecorded sites consists of one or more stacked-rock cairns. These seven archaeological sites are all located on the margins of the property and will not be impacted by the proposed development. SRI recommends that these seven sites should be avoided. If development plans change and the sites will be impacted by the development, then they should be evaluated for listing in the CRHR.

### Historical Resources

Per the project-specific cultural report, no historical-period structures or other features are depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do not show any structures or other features in the project area. The 1941 Toro Peak, California, 15-minute USGS quadrangle shows a dirt road running through the project area to Magnesia Spring, but no structures are present. The 1957 Rancho Mirage, California, 7.5-minute USGS quadrangle shows a spot simply labeled “water” in the middle of the project area.

## 4.5.3 Regulatory Setting

### Federal

#### *National Historic Preservation Act*

The National Historic Preservation Act (NHPA) (54 USC 300101 et seq.) instituted a multifaceted program, administered by the Secretary of the Interior, to encourage sound preservation policies of the nation’s cultural resources at the federal, State, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Place (NRHP), established the position of State Historic Preservation Officer, and provided for the designation of State Review Boards. The NHPA also

set up a mechanism to certify local governments to carry out the goals of the NHPA and created the Advisory Council on Historic Preservation (ACHP).

Section 106 of the NHPA (54 USC 306108) states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible in the NRHP. After an undertaking is identified, federal agency stakeholders shall consult by notifying the appropriate consulting parties. Consultation is between the federal agency, the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), and other consulting parties including but not limited to the ACHP, certified local governments, and members of the general public with an economic, social or cultural interest in the project.

### *National Register of Historic Places*

The National Register of Historic Places (NRHP) was established by the NHPA in 1966 as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR part 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be *significant* in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess *integrity* of location, design, setting, materials, workmanship, feeling, and association.

A property is eligible for the NRHP if it is *significant* under one or more of the following criteria:

- **Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** It is associated with the lives of persons who are significant in our past.
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** It has yielded, or may be likely to yield, information important to prehistory or history. Ordinarily cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must be 50 years of age to be considered for the NRHP unless it satisfies a standard of exceptional importance.

## State

### *California Register of Historical Resources*

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" Public Resources Code (PRC) (Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC Section 5024.1 (c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

CEQA also requires lead agencies to determine if a project would have a significant effect in the environment, including significant effects on historical or archaeological resources. Under CEQA Section 21084.1, a project that may cause a substantial adverse change to the significance of a historical resource is a project that may have a significant effect on the environment. CEQA guidelines recognize that historical resources include;

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR;
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

If a lead agency determines that an archaeological site is a historical resource, then the resource under CEQA must be protected. If a project may cause a substantial adverse change to the recourse and avoidance is not feasible, the lead agency must identify potentially feasible measures to measures to lessen the impact to less than significant levels.

If an archaeological site does not meet the historical resource criteria contained in the State CEQA Guidelines, and it is not deemed a unique archaeological resource in accordance, no further action would be required.

### Regional and Local

#### *City of Rancho Mirage Historic Preservation Commission*

The Historic Preservation Commission consists of five (5) members appointed by the City Council. The commission reviews nominations of certain structures, sites, and districts of historic significance and makes recommendations to the City Council as to which structures, sites, and/or districts within the City should be designated a Historical Resource of the City.

## 4.5.4 Project Impact Analysis

### Thresholds of Significance

The thresholds used to evaluate potential impacts to cultural resources are derived from Appendix G of the CEQA Guidelines. The significance determination is based on the recommended criteria set forth in Section 15064.5 of the CEQA Guidelines. For analysis purposes, development of the proposed project would have a significant effect on cultural resources if it is determined that the project would:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5?
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?
c. Disturb any human remains, including those interred outside of formal cemeteries.

Threshold topic “c” is not analyzed further since screening criterion related to project cultural resources concluded that there would be no impacts or less than significant impacts. See 4.5.1, *Introduction,* of this Cultural Section.

### Methodology

As part of the preparation of the Environmental Impact Report (EIR), Statistical Research, Inc. (SRI), conducted a Phase I cultural resources study of the entire 230-acre project area. With the closure of the California Historical Resources Information System Eastern Information Center (EIC) and the long delay

in being able to obtain records-search results, SRI conducted a records search through an alternative program in coordination with the project proponent that involved obtaining cultural resources records from sources other than the EIC. The goal of the records search was to review any previous archaeological projects that may have been conducted within the project area and to identify previously recorded archaeological resources located on the property.

The results of the records search indicated that six previously conducted projects included work in portions of the project area. These studies included approximately 85 to 95 percent of the current project area and resulted in the identification and recording of thirteen archaeological sites and one isolated artifact within the entire 230-acre estate boundary. These sites within the estate boundary consist of three pottery scatters, four milling-feature sites, and six rock-cairn alignment sites. The isolated artifact is a metate fragment.

A buried-site-sensitivity model revealed that 69.71 percent of the project area is moderately sensitive for buried archaeological resources, in areas deeper than 5–10 feet below the ground surface. No portions of the project area were found to have a high or very high sensitivity for buried archaeological resources. Areas that are not sensitive are the portions of the project along hillslopes of greater than 25° from horizontal and in areas underlain by geologic units older than the late Pleistocene.

SRI surveyed all undeveloped portions of the project area and checked the locations of previously recorded resources within the developed portions of the project area. All of the 79.5 acres of the three undeveloped areas were surveyed, and areas of open ground surface in the seven proposed development areas were checked as well. Within the undeveloped areas, ground visibility was good, with little vegetation present. The seven development areas were covered extensively by vegetation and other landscaping. Seven previously recorded archaeological sites were visited and rerecorded during the survey. six other previously recorded sites and the previously recorded metate could not be relocated.

No historical-period structures or other features are depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do not show any structures or other features in the project area.

Part of the records search and literature review involved contacting the Native American Heritage Commission (NAHC) for a list of traditional-use areas or sacred sites within the project area and a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. The NAHC Sacred Lands File search did not indicate the presence of Native American traditional cultural places within the project area. However, the NAHC provided a list of 19 contacts who could provide additional information on cultural resources within the project area. SRI sent a letter to all 19 contacts, describing the proposed project to solicit their input on the site. Seven Tribes responded in writing, six of the Tribes that responded had no further information to provide and

did not identify the site as having cultural significance to their Tribe. One Tribe responded that the site was not located in their traditional boundaries but is found to be part of their Traditional Use Area (TUA). Therefore, they have requested all copies of the records search, cultural report and site records, and the presence of an approved Native American Cultural Resources Monitor.

A pedestrian survey of the project area was conducted on May 27–29, 2020, by a team of three archaeologists. Because of the varied terrain of the project area, survey methods differed across the landscape, based on slope and level of development. At the edges of the project area, the crew surveyed open areas spaced at 15-m intervals, except in areas where the slope was very steep. In those areas, open ground was inspected where it was safe to walk. Within the golf course, the locations of previously recorded sites were examined, to determine whether the sites were still present or whether they had been destroyed. The progress of the survey was monitored by means of Trimble Geo XT/XH Global Positioning System (GPS) units and high-resolution aerial photographs. The locations of previously recorded sites were photographed, and GPS points were taken at the recorded locations.

SRI surveyed all undeveloped portions of the project area, checked the locations of previously recorded resources within the developed portions of the project area, and checked the proposed development areas to confirm that these areas are highly disturbed from previous construction.

## Project Impact

### *a. Would the project cause a substantial adverse change in the significance of a historical resource as pursuant to section §15064.5?*

As discussed throughout this document, the project site has been disturbed by development since 1997. The results of the records search and fieldwork performed by SRI identified thirteen previously recorded prehistoric archaeological sites in the overall project area. Six of these sites were not relocated. One of these six sites (RIV-3048) was previously recorded in a proposed development area, but this site was destroyed during construction of the golf course, and no other known cultural resources are located in the proposed development areas. SRI relocated and documented seven of the thirteen previously recorded sites. Each of these rerecorded sites consists of one or more stacked-rock cairns. These seven archaeological sites are all located on the margins of the property and will not be impacted by the proposed development. SRI recommends that these seven sites should be avoided. If development plans change and the sites will be impacted by the development, then they should be evaluated for listing in the CRHR. The other five sites that were previously identified and described in the prior cultural reports could not be located during the 2020 investigation because they were destroyed through development of the golf course.

Historical maps were consulted for information regarding specific historical-period land use in and around the project area. The online USGS Historical Topographic Map Collection and online BLM/U.S. General Land Office (GLO) records were consulted. No historical-period structures or other features are

depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do not show any structures or other features in the project area. Impacts to historical resources are less than significant without mitigation.

### *b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

No portions of the project area were found to have a high or very high sensitivity for buried archaeological resources. The results of the records search indicated that six previously conducted studies projects included approximately 85 to 95 percent of the current project area and resulted in the identification and recording of thirteen archaeological sites and one isolated artifact within the current property boundaries.[1] These sites within the current property boundaries consist of three pottery scatters, four milling-feature sites, and six rock-cairn alignment sites. The isolated artifact is a metate fragment. It has been determined from an analysis of aerial photographs and inspections of the visible ground surface; the entire area of the golf course has been extensively altered during construction. Any archaeological sites within the golf course would have been destroyed during its construction, and if any subsurface deposits were present, they were likely also destroyed.

The results of the records search and fieldwork performed by SRI identified thirteen previously recorded prehistoric archaeological sites in the overall project area. Six of these sites were not relocated. One of these six sites (RIV-3048) was previously recorded in a proposed development area, but this site was destroyed during construction of the golf course, and no other known cultural resources are located in the proposed development areas.

SRI conducted a buried-site-sensitivity analysis to determine whether parts of the project area could contain buried archaeological resources. The project area is moderately sensitive for buried archaeological resources, in areas deeper than 5–10 feet below the ground surface. No portions of the project area were found to have a high or very high sensitivity for buried archaeological resources. All land within the golf course, including the seven proposed development areas, has been heavily disturbed by the development of the golf course and is unlikely to contain any intact archaeological resources on the ground surface. The buried site sensitivity model (BSSM) showed that 69.71 percent of the project area is moderately sensitive for buried archaeological resources; however, given the level of disturbance in the project area, associated with the construction of the golf course, this sensitivity applies only to sediments deeper than 5–10 feet below the ground surface.

[1] To avoid any entitlements or development in the portion of the estate property located within the CVSMHCP conservation area/Measure "V" mountainous lands, the project site has reduced to 191-acres out of the 230-acre property. However, the cultural resources study area included the entire 230-acre estate property and the surrounding area.

Given the lack of sensitivity for buried archaeological resources above 5–10 feet below ground surface, SRI does not believe archaeological monitoring is warranted in the proposed development areas. However, SRI recommends that a qualified archaeologist should be retained in case unanticipated discoveries are made. Additionally, the records search and literature review performed by SRI, involved contacting the Native American Heritage Commission (NAHC) for a list of traditional-use areas or sacred sites within the project area and a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. The Agua Caliente Band of Cahuilla Indians identified the site as part of the Traditional Use Area and requested a Native American Monitor. This request has been incorporated into the project as a mitigation measure. Implementation of **Mitigation Measure CUL-1** and **CUL-2** would ensure impacts to archaeological resources would be less than significant.

## 4.5.5 Cumulative Impacts

Continued development in the City of Rancho Mirage could contribute to the loss of historical and archaeological resources. As discussed in this section, the proposed project would not directly contribute to the loss of any known resources. Future development projects would be evaluated on a case by case basis for impacts, and would be subject to all applicable federal, state, and local laws. Therefore, with adherence to policies and mitigation as identified in this section, all new development within the proposed project is expected to be less than significant.

## 4.5.6 Mitigation Measures

**CUL-1:** The applicant shall retain a qualified archaeologist that meets the Secretary of Interior's Standards for professional archaeology, in the event that unanticipated discoveries are made. If suspected prehistoric or historical-period archaeological resources are encountered during construction, all construction activities within a 50-foot radius of the find should be halted and a qualified archaeologist should be contacted.

**CUL-2:** An approved Agua Caliente Tribal Cultural Resources Monitoring shall be present on site if excavations are deeper than 5-10 feet below the ground surface in the previously disturbed golf course areas. Should development occur in undisturbed areas of the property, tribal monitors shall be present prior to the commencement and during ground disturbing activities. If buried cultural deposits are encountered, the monitor may request that destructive construction halt and the monitor shall notify a qualified archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Office and the Agua Caliente Tribal Historic Preservation Office.

## 4.5.7 Level of Significance After Mitigation

With the implementation of **Mitigation Measure CUL-1 and CUL-2** impacts to cultural resources are reduced to less than significant.

## 4.5.8 Resources

1. California Register of Historical Resources https://ohp.parks.ca.gov/?page_id=21238, accessed July 2020.
2. Rancho Mirage General Plan, Chapter 5 Conservation and Open Space, accessed June 2020.
3. Rancho Mirage Historic Preservation Commission https://ranchomirageca.gov/our-city/city-boards-commissions/historic-preservation-commission/, accessed July 2020.

# 4.5 Energy Resources

## 4.5.1 Introduction

This section describes the existing energy resources setting and potential impacts from implementation of the proposed Porcupine Creek Retreat project. Information for this section was obtained in August 2020 from the calculations provided by CalEEMod Version 2016.3.2 for the project. The CalEEMod calculations are included in **Appendix B.1 and B.2** of this Draft EIR. Additional documents relevant to the analysis of energy resources was provided by the City of Rancho Mirage, including the *Rancho Mirage General Plan*, *General Plan EIR, Final EIR*, *Energy Action Plan*, *Greenhouse Gas Inventory*, and *Sustainability Plan*. Sources used in the preparation are included in **Chapter 8, *References*,** at the end of this Draft EIR.

**Section 4.2, *Air Quality***, **Section 4.7, *Greenhouse Gas Emission***, **Section 4.9, *Hydrology and Water Quality***, and **Section 4.13, *Transportation,*** of this Draft EIR provide further discussion regarding the project's estimated energy use and infrastructure, as well as their associated environmental impacts. This portion of the Draft EIR primarily concentrates on energy consumption via electricity, natural gas, and mobility-related petroleum (gasoline and diesel fuel).

## 4.5.2 Environmental Setting

### Existing Conditions

The proposed project site occupies approximately 191-acres of the Porcupine Creek estate, which is a 230-acre property in the City of Rancho Mirage, Riverside County, California. The site is bounded by the Santa Rosa Mountains to the west and south, medium density residential to the east, and the Rancho Mirage Elementary School to the north. Currently, the Porcupine Creek Estate operates as a private estate and golf club. Porcupine Creek was entitled in 1997 and thereafter constructed as a private estate with a variety of recreational amenities. Since 2011, the property has been remodeled and upgraded to its existing state. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, fitness center, a gate house, and two new villas. In addition, landscaping and irrigation throughout the property has also been remodeled. The estate currently operates as a vacation property for the current owner, his family, and guests. In addition to these baseline conditions, two new villas, a new fitness pavilion and a new electric substation will be developed onsite in 2020 under the existing entitlements to serve the existing private estate.

Energy sources are made available to the City of Rancho Mirage by private and public agencies. Major energy providers in the Coachella Valley include Southern California Edison (SCE), Imperial Irrigation

District (IID), and the Southern California Gas Company (The Gas Company or SoCalGas). Electricity and natural gas are the primary sources of energy in the City of Rancho Mirage.

Title 24 of the California Administrative Code sets efficiency standards for new construction, regulating energy consumed for heating, cooling, ventilations, water heating, and lighting. These building efficiency standards are enforced through the City's building permit process. As previously stated, the project site is currently developed as an estate property with golf course and recreational facilities. Electricity and natural gas are provided to the site by SCE and the Rancho Mirage Energy Authority, and The Gas Company, respectively.

## *Electricity*

### *State*

The California Energy Commission (CEC) is the state's primary energy policy and planning agency and plays a critical role in implementing and creating policies and programs to create a low-carbon economy. According to the CEC's Energy Consumption Database, the State of California consumed approximately 284,436 gigawatt hours (GWh) of electricity in the most recent available year, 2018. Electricity demand in California is projected to rise to approximately 354,209 GWh (high energy demand) in 2030, according to the CEC.

Electricity usage in California for different land uses varies substantially by the type(s) of uses in a building, type(s) of construction materials used in a building, and the efficiency of all electricity consuming devices within a building. Due to the State's energy efficiency standards and efficiency and conservation programs, California's per capita electricity use had remained stable for more than 30 years, while the national average has steadily increased. The State produces approximately 82 percent of its electricity and imports the remaining 18 percent. The California Independent System Operator (ISO) governs the transmission of electricity from power plants to utilities.

### *Regional and Local*

Southern California Edison

Southern California Edison (SCE) is one of the nation's largest electric utilities, providing electricity service to more than 15 million people in a 50,000 square-mile area of central, coastal and Southern California. SCE serves residents in Fresno, Imperial, Inyo, Kern Kings, Los Angeles, Madera, Mono, Orange, Riverside, San Bernardino, Santa Barbara, Tuolumne, Tulare and Ventura Counties. According to the CEC Energy Consumption Database, approximately 104,406 GWh was consumed in SCE's service area in 2018.

SCE is regulated by the California Public Utilities Commission (CPUC) and the Federal Energy Regulatory Commission (FERC). SCE receives electric power from a variety of sources. According to the Edison International 2019 Sustainability Report, SCE delivered an estimated 48 percent carbon-free electricity

to customers. This is an improvement from the 46 percent renewable energy portfolio that SCE achieved in 2018. Electricity distribution lines in the project area are located above and underground. Each year, SCE allocates capital funds for the purposes of converting overhead electric distribution lines. Under provisions of Rule 20A established by the CPUC, the City may designate major streets for underground overhead lines.

In addition, a variety of energy conservation programs provided by SCE to City residents and businesses. These programs include:

- Rebates, incentives and saving tips including a Summer Discount Plan, Mobile Home Upgrade Program, Budget Assistant and Time-of-Use Plans.
- Incentives for using electric vehicles including the Clean Fuel Reward Program and the Charge Ready Home Installation rebate.
- Energy Management Center introduces new energy management products, programs, rebates and tools.

City of Rancho Mirage General Plan

In Rancho Mirage, electric power service is provided primarily by Southern California Edison (SCE), with a limited portion of the northeast quadrant of Rancho Mirage in the Imperial Irrigation District (IID). Electricity is transmitted to Rancho Mirage primarily through high-voltage lines and step-down transformers at the Devers substation near Desert Hot Springs and substations located throughout Rancho Mirage. Currently, there is no power generation in the City itself.

SCE facilities include 12 kV transmission lines for local distribution. High voltage lines for more distant transmission rang up to 115 kV and 230 kV. Substations step down voltage for local distribution and use. Three substations serve Rancho Mirage: one on Highway 111, east of Thunderbird Cove, one on Clancy Lane at Monterey Avenue, and one on Plumley Road south of 35$^{th}$ Avenue.

Community Choice Aggregation

In March of 2016, the City's Budget Subcommittee authorized staff to proceed with a feasibility study on a Community Choice Aggregation (CCA). Forming a CCA under AB 117 allows a local government to manage the electric supply on a community level, instead of through the local purveyor, in this case SCE. The CCA, which would be controlled by the City Council, would purchase the power necessary for the community and that power would be delivered through SCE infrastructure. SCE would still maintain control of the poles, wires and necessary infrastructure to deliver the power purchased by the CCA. Customers' electric bills would be based on the rate schedules set by the CCA. CCA's provide a community and individual customers with a choice where one did not exist before. This choice often leads to lower monthly electricity bills, cleaner energy, and economic development advantages. The Rancho Mirage Energy Authority started providing power to its residents in 2018.

Rancho Mirage Energy Authority

The Rancho Mirage City Council started the Rancho Mirage Energy Authority (RMEA) for the purpose of helping to reduce the community's SCE electricity bills. Pursuant to CCA law, RMEA is an all-new, locally-run, not-for-profit power program created by the City of Rancho Mirage. RMEA purchases power directly from power providers, pays consultants for compliance functions, and sets electricity rates based on costs. RMEA power is delivered through SCE poles and wires. SCE is still the utility and will continue to bill and collect from customers but using RMEA's lower electricity rates will allow businesses and residents to save 5 percent.

RMEA also allows customers to choose 100 percent renewable energy through their Premium Renewable Choice rate plan. This plan offers customers the option of "opting-up" to 100 percent renewable energy at an affordable price. Residential and commercial accounts will see an incremental increase from the Base Choice rate of $0.009 or 0.9 cents per kWh.

## ***Natural Gas***

### *State*

According to the California Energy Commission (CEC), one third of energy consumed in California is natural gas. Natural gas sources of the State of California include in-State sources (8 percent), Canada (27 percent), the Rockies (27 percent), and the southwest (38 percent). Gas from outside sources enter the State through large, high pressure gas lines. These transmission lines feed natural gas storage areas located in Orange and northern Los Angeles counties, which serve all of southern California. Nearly 45 percent of the natural gas burned in California is used for electricity generation, and much of the remainder is consumed in residential (21 percent), industrial (25 percent), and commercial (9 percent) uses.

### *Regional and Local*

Natural gas is the primary source of energy used in the City for space heating, domestic and commercial hot water, cooking, and air conditioning spaces. The Southern California Gas Company ("SoCalGas" "The Gas Company") is the principal distributor of natural gas in Southern California, including Rancho Mirage, serving residential, commercial, and industrial markets. SoCalGas has 21.4 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the city of Visalia to the US-Mexico border.

The Gas Company serves the City of Rancho Mirage and the project site. The closest major supply lines to the project property are located along Highway 111, approximately 0.50 miles northeast of the Porcupine Creek property.

High-pressure distribution lines are also located approximately 0.50 miles northeast of the project site along Highway 111. As the project site is currently developed as a private residence with golf course and amenities, natural gas is already provided to the site.

### *Petroleum*

#### *State*

There are more than 27 million registered vehicles in California, and those vehicles consumed an estimated 18.5 billion gallons of petroleum and diesel in 2014, according to the CEC. Gasoline and other vehicle fuels are commercially provided commodities and would be available to the project via commercial outlets.

According to the CEC, transportation accounts for nearly 37 percent of California's total energy consumption. Petroleum-based fuels account for approximately 92 percent of California's transportation energy sources. Technological advances, market trends, consumer behavior, and government policies could result in significant changes to fuel consumption by type and total. Various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and Greenhouse Gas (GHG) emissions, and reduce vehicle miles traveled (VMT), at the federal and state levels. Technological advances have made use of other energy resources or alternative transportation modes increasingly feasible, as market forces have driven the price of petroleum products steadily upward.

#### *Regional and Local*

According to the Rancho Mirage General Plan, two regional routes serve the City of Rancho Mirage: State Highway 111 and Interstate 10 (I-10). Highway 111 extends from its juncture with I-10, several miles west of Palm Springs and southeast to Brawley, in the Imperial Valley. I-10 connects the Los Angeles region with Arizona and other cities and states to the east. These two roadways provide regional and interstate connections for Rancho Mirage and the Coachella Valley.

Vehicular access to the site occurs at the east side of the property, at Dunes View Road. This entry point is gated and is intended for use by the owner and guests. A secondary gated service entry at the northern property corner, at Mirage Road, is intended for staff and deliveries.

The vehicular circulation system consists of an interior network of private driveways with a central spine road leading from the primary entry on Dunes View Road to the Estate's primary residence. Project guests will arrive via vehicle at the main entrance. Private vehicles will be collected by a valet on arrival. Guests will then be shuttled to and from accommodations via golf cart. Parking will be provided (within the gated property) along the access road (Entrance at Mirage Road) along the Magnesia North flood channel for staff, ground and maintenance employees as well as guest vehicles.

## 4.5.3 Regulatory Setting

### International

#### *Clean Power Plan*

In June 2014, the Environmental Protection Agency (EPA) proposed the Clean Power Plan (CPP), the first-ever carbon pollution standards for existing power plants that will protect children's health and put the US on the path toward a 30 percent reduction in carbon pollution from the power sector by 2030. Power plants are the largest single source of carbon pollution, accounting for about one-third of all domestic greenhouse gas emissions. The CPP will set standards for carbon pollution from power plants, just as the US has set limits on power plant emissions of arsenic, mercury, sulfur dioxide, nitrogen oxides, and soot.

In November 2014, in a historic joint announcement with China, U.S. President Barack Obama laid out an ambitious but achievable target to reduce GHG emissions in the U.S. in the range of 26 to 28 percent below 2005 levels by 2025, while China announced its intent to peak carbon emissions around 2030 and to double its share of zero-carbon energy to 20 percent. The announcement was a historic step for climate change action and for the US-China relationship, as the world's two largest economies, energy consumers, and carbon emitters came together to demonstrate leadership on an issue that affects the entire world.

#### *2015 United Nations Paris Climate Change Conference*

On December 12, 2015, 195 nations, including the U.S. and China, agreed upon a strategy for combatting global climate change to be in effect in 2020. This historic meeting, known as the 21st annual Conference of the Parties (COP21), focused on five key elements: mitigation, a transparency system and global stock-take, adaptation, loss and damage, and support. In mitigating global climate change, COP 21 participating nations agreed upon a universal long-term goal of keeping the global temperature rise below 2° C above pre-industrial levels. The agreement also encouraged participating nations to limit temperature increases even further to 1.5° C or 2.7° F above pre-industrial levels. In addition to that, nations agreed to peak their GHG emissions as soon as possible, with the recognition that developing countries may take longer than developed countries. Thereafter, nations are to undergo rapid reductions in accordance to best available technological advances. The nations are to submit national climate action plans that detail future objectives to address climate change.

On October 5, 2016, the threshold for entry into force of the Paris Agreement was achieved. The Paris Agreement entered into force on November 4, 2016. The United States withdrew from the Paris Agreement on June 1, 2017.

### Federal

### *Climate Action Plan*

On June 25, 2013, President Obama announced the Climate Action Plan (CAP), a national plan for tackling climate change. The CAP is divided in to three sections and outlines the steps to cut carbon pollution in the United States, including standards for both new and existing power plants, action to prepare the U.S. for the impacts of climate change, and plans to lead international efforts to address global climate change.

### *Federal Regulation and the Clean Air Act*

Coinciding with the 2009 meeting in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding noted that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the EPA has not promulgated regulations on GHG emissions, but it has already begun to develop them.

Previously the EPA had not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures.

### *Corporate Average Fuel Economy Standards*

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards reduce energy consumption by increasing the fuel economy of passenger cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and the U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.

### *Federal Energy Regulatory Commission*

The Federal Energy Regulatory Commission (FERC) is an independent agency that regulates the transmission and sale of electricity, natural gas, and oil in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters. The setting and enforcing of interstate transmission sales is also regulated by FERC.

### *Federal Energy Policy and Conservation Act*

In 1975, Congress enacted the Federal Energy Policy and Conservation Act to serve the nation's energy demands and promote feasibly attainable conservation methods. This act established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National

Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards were approved for model year 2017 passenger cars and light trucks at 54.5 miles per gallon. Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

### *Intermodal Surface Transportation Efficiency Act of 1991*

The Intermodal Surface Transportation Efficiency Acts of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility, as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations were to address in development transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

### *The Transportation Equity Act for the 21st Century*

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of informed transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

### *Energy Policy Act of 2005*

The Energy Policy Act of 2005 addresses energy production in the United States, including (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) tribal energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology. The act includes provisions such as increasing the amount of biofuel that must be mixed with gasoline sold in the United States and loan guarantees for entities that develop or use innovative technologies that avoid the by-production of greenhouse gases (GHGs).

### *Energy Independence and Security Act of 2007*

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standard (Sections 301-325)
- Building energy Efficiency (Sections 411-441)

This federal legislation requires ever-increasing levels of renewable fuels to replace petroleum. The USEPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Environmental Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the Act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, and RFS program was expanded in several key ways that lay the foundation for achieving the significant reduction of GHG emissions from the use of renewable fuels, for reducing imported petroleum, and encouraging the development and expansion of the nation's renewable fuel sector. The updated program is referred to as RFS2 and includes the following:

- Expanded RFS program to include diesel, in addition to gasoline.
- Increased volume of renewable fuel required to by blended into transportation fuel from nine billion gallons in 2008 to 36 billion by 2022.
- New categories of renewable fuel and separate volume requirements for each one.
- Requirement that the USEPA apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA addresses energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

### *Leadership in Energy and Environmental Design*

The U.S. Green Building Council (USGBC) is committed to transforming the way buildings are designed, constructed, and operated through the Leadership in Energy and Environmental Design (LEED) certification program. LEED acts as a certification program for buildings and communities to guide their design, construction, operations and maintenance toward sustainability. LEED is based on prerequisites and credits that a project meets in order to achieve a certification level of Certified, Silver, Gold, or Platinum.

## State

### *California Code of Regulations Title 13, Section 2449(d)(3) and 2485*

California Air Resources Board (CARB) is responsible for enforcing California Code of Regulations (CCR)

Title 13 Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment.

### *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*

Located in CCR Title 24, Part 6 and commonly referred to as "Title 24", these energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The goal of Title 24 energy standards is the reduction of energy use. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. In December 2019, the California Energy Commission (CEC) adopted the 2019 Building and Energy Efficiency Standards with the effective date of the 2019 Standards beginning January 1, 2020. This code requires new homes to include at least 50 percent of kitchen lighting to be LED, compact fluorescent or similar high efficiency fixtures, double pane windows, cool roofs, and other design techniques to reduce heat loss.

Title 24 also includes Part 11, known as California's Green Building Standards (CALGreen). The CALGreen standard took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential, and State-owned buildings, as well as schools and hospitals. The 2019 CALGreen standards became effective on January 1, 2020. Part 11 establishes design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

### *Energy Action Plan II*

The California Energy Commission (CEC), California Power Authority, and California Public Utilities Commission (CPUC) adopted an Energy Action Plan (EAP) to establish goals for California's energy future and a means to achieve these goals. EAP II supports and expands on the commitment of State agencies to cooperate and reflect on the energy actions since original EAP adoption. EAP II includes a coordinated implementation plan for state energy policies that have been articulated through Executive Orders, instructions to agencies, public positions, and appointees' statements; CEC's integrated Energy Policy Report; CPUC and CEC processes; agencies' policy forums; and legislative direction.

### *Integrated Energy Policy Report*

The CEC is responsible for preparing Integrated Energy Policy Reports, which identify emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The CEC's 2019 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, and the California Energy Demand Forecast, in an effort to leverage California's clean electricity system to decarbonize, or remove carbon from, other portions of the state's energy system.

The Integrated Energy Policy Report discusses the State's policy goal of becoming 100 percent zero-carbon by 2045.

### *Renewable Portfolio Standards*

As most recently amended by SB 350, the Renewable Portfolio Standard requires an annual increase in renewable energy generation by utility providers equivalent to at least 33 percent by 2020 and 50 percent by 2050 (Interim Renewable Portfolio Standards targets are also set between 2020 and 2030).

### *State Vehicle Standards*

The CARB Advanced Clean Cars program for passenger vehicles cars and light trucks serves to reduce petroleum consumption by increasing the operating efficiencies of vehicles and accelerating the penetration of plug-in hybrid and zero-emission vehicles in California. CARB has also adopted regulations that enhance the operating efficiencies of various types of construction equipment. While such regulations primarily are adopted to reduce air pollution, co-benefits in the form of reduced petroleum consumption are common.

### *Sustainable Communities Strategy*

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As specifically codified in Government Code Section 65080, SB 375 requires the Metropolitan Planning Organization relevant to the project area (in this case, the Coachella Valley Association of Governments [CVAG]) to include a Sustainable Communities Strategy (SCS) in its Regional Transportation Plan (RTP). While the main focus of the SCS is to plan for growth that will ultimately reduce GHG emission, the strategy is also a part of a bigger effort to address many other development issues within the general vicinity, including transit and vehicle miles traveled (VMT).

### *California Assembly Bill 32 (AB 32)*

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMT). Accordingly, 427 million $MTCO_2e$ equivalent was established as the emissions limit for 2020.

## Regional

### *Coachella Valley Association of Governments Desert Cities Energy Partnership*

The Coachella Valley Association of Governments (CVAG) is a sub-regional organization within the Southern California Association of Governments (SCAG). CVAG operates as part of larger jurisdictional or regional teams within the Coachella Valley, made up of ten cities, Riverside County, and two Native American Indian tribes. CVAG initiated the Desert Cities Energy Partnership with SCE and SoCalGas through an Agreement effective January 2010. The First Amendment to the agreement between CVAG and the utilities to continue the partnership through December 31, 2014 was authorized by CVAG Executive Committee in December 2012. Since then, the Second through Fifth Amendments to the agreement extended the Partnership each year and provided an authorized budget. The Fifth Amendment was approved to extend the program to December 2018, including a reduction in the SCE budget amount for the Desert Cities Energy Partnership. SCE, SoCalGas, and the CPUC continue to evaluate the benefits as well as the future of these partnerships.

The goal of the Desert Cities Energy Partnership is to help local governments effectively lead their communities to increase energy efficiency, reduce greenhouse gas emissions, protect air quality and ensure that their communities are more livable and sustainable. The partnership provides performance-based opportunities for the Coachella Valley jurisdictions to demonstrate energy efficiency leadership in our communities through energy saving activities.

### *The Green for Life Program*

According to the 2012 Rancho Mirage Energy Action Plan, the Green for Life Program is funded by SCE under the auspices of the CPUC and administered by CVAG. It provides the City with a number of valuable services including:

- Building “Tune-ups” Through Commissioning/Retro-Commissioning (RCx);
- Benchmarking;
- Utility Manager Program – Enterprise Energy Management Information Systems (EEMIS);
- Voluntary Green Building Program;
- Greenhouse Gas (GHG) Inventory;
- Sustainability Plan;
- Energy Action Plans; and
- Regional Planning.

### *Rancho Mirage Sustainability Plan*

The City of Rancho Mirage completed the 2013 Sustainability Plan: Leadership in Energy Efficiency (Sustainability Plan) in May 2013. The Sustainability Plan is a framework for the development and implementation of policies and programs that will reduce the City’s emissions, working towards the Statewide target of 1990 levels by 2020, set by AB 32. For the City to achieve the Statewide target of

1990 levels by 2020, it will have to reduce emissions by 54,272 metric tons of carbon dioxide equivalent (MTCO2e), a 19.8 percent reduction. The set of measures presented in the Sustainability Plan will reduce the City's GHG emissions by 60,411 MTCO2e, which reduces GHG emissions by 6,139 MTCO2e more than the AB 32 target amount of 54,272 MTCO2e.

### *Rancho Mirage Energy Action Plan*

The 2012 Energy Action Plan (ePlan) provides a roadmap of actions within the City's municipal operations, to help reduce energy consumption, to reduce operating costs, and increase energy awareness. The goals focus on three areas: retrofit and expansion of municipal facilities, upgrading the municipal fleet, and consideration of municipal programs and actions that will help reduce municipal and community-wide energy use and greenhouse gas emissions. It focuses on ways the City can reduce costs at the same time as energy efficiency is enhanced. The City developed this plan to move aggressively toward its 10 percent energy reduction target.

### *Electric Vehicle Infrastructure:*

Rancho Mirage will follow a deliberate plan to develop an infrastructure for electric vehicles (EVs) and will:

- Establish charging/refueling station at City Facilities
- Work with local gas stations and others to promote public charging stations
- Continue to seek grants and partnerships to increase penetration of EVs in the community.

### *Rancho Mirage Municipal Code*

The City of Rancho Mirage includes provisions in its Municipal Code that encourage the use of alternative transportation means that reduce the use of nonrenewable energy. The following list includes some of these provisions:

- 10.70.010, Golf Cart Transportation Plan, which establishes golf cart routes within the City of Rancho Mirage.
- 17.26.030, Parking and Loading Standards, requires new construction and projects requiring discretionary action to provide electric vehicle charging stations.
- 15.84, Small Residential Rooftop Solar Energy System Permits, requires timely and cost-effective installations of small residential rooftop solar energy systems.

### *Rancho Mirage General Plan*

The Rancho Mirage General Plan Public Services and Facilities (PS&F) Element addresses utility facilities that are utilized by the City. The purpose of the Public Services and Facilities Element is to establish City policy that provides for a coordinated system of the services to adequately serve Rancho Mirage at full buildout. The element also identifies standards for infrastructure relative to population or land use

intensity and identifies courses of action and programs that provide the means to implement the goals and policies of the element.

The Conservation and Open Space (COS) Element in the Rancho Mirage General Plan defines and establishes goals, policies, and programs toward preserving and managing valuable resources in the City. It addresses the need for conservation, diverse development and thoughtful use and management of energy and mineral resources.

### *Electric Power*

The PS&F Element indicates the Electric power services in the City of Rancho Mirage are provided by the Southern California Edison Company (SCE), and to a limited extent, the Imperial Irrigation District (IID). Rancho Mirage has several SCE transmission substations throughout the City. Electric power is primarily generated outside the Coachella Valley, but SCE purchases wind-generated power from local producers. SCE facilities include 12 kV transmission lines for local distribution. Higher voltage lines for more distant transmission range up to 115 kV and 230 kV. Substations step down voltage for local distribution and use. Three substations serve Rancho Mirage: one on Highway 111, east of Thunderbird Cove, one on Clancy Lane at Monterey Avenue, and one on Plumley Road south of 35$^{th}$ Avenue.

### *Renewable Energy (Solar)*

According to the Conservation and Open Space Element of the 2017 General Plan, solar and wind energy, the region has one of the highest insolation (sunshine) values in the United States and is the site of major energy installations. Solar energy, primarily in the form of thermal systems, is now widely used in the Coachella Valley.

The cost of producing and installing solar photovoltaic systems that involve the direct conversion of sunshine to electricity has dramatically decreased in recent years. The application of these systems has been seen in some small commercial sites that have made these sites self-sufficient; in addition, the popularity of residential solar systems has increased dramatically over the last few years. In an effort to further promote sustainability, the City adopted Ordinance 1070 in 2013, which required all new residential projects be solar ready. This is outlined in the 2019 California Building Energy Efficiency Standards (Title 24 Part 6) which establishes mandatory requirements for solar ready buildings for single family residences, low-rise multifamily buildings, and high-rise multifamily buildings. As of January 1, 2020, solar is required on residential developments in the State of California.

### *Renewable Energy (Wind)*

Wind energy is another locally abundant renewable energy resource, according to the COS Element in the City's General Plan. The San Gorgonio Pass, including the Edom Hill resource area, is one of the world's most successful wind energy production sites, with the potential to provide over 3,000 megawatts of clean and renewable electrical generating capacity. The cost of wind generated electricity

is now competitive with electricity generated by coal or natural gas. Moreover, it is generally conceded that the true costs of energy from fossil or nuclear fuels are not yet fully factored into their market price. The performance of commercial scale turbines on the western slope of Edom Hill would appear to indicate that the use of wind will continue to expand. As the many costs associated with the use of fossil fuels continue to rise, renewable alternatives such as wind will become progressively more desirable and cost effective to develop. All wind-generated electricity in the Coachella Valley is sold to SCE and other distributing companies.

### *Natural Gas*

According to the Public Services and Facilities Element, natural gas provides more electricity generation than any energy source in California. Data gathered as of September 10, 2015 by the California Energy Commission indicates that 60 percent of all electric generation in California comes from natural gas. Southern California Gas provides natural gas service to the City of Rancho Mirage. This agency has regional and local distribution lines in Rancho Mirage and the sphere of influence. Natural gas is commonly used for space heating, domestic and commercial hot water, cooking and air conditioning applications.

Although it is a nonrenewable resource, natural gas is generally considered a clean and efficient fuel and is preferable to many other nonrenewable resources such as oil. Rancho Mirage is located in the Southern California Gas Company's (SoCalGas) service district. SoCalGas has developed a wide range of energy management, conservation, and equipment retrofit programs for its consumer base. Assistance in facilities planning and analysis is also provided by SoCalGas to maximize energy efficiency and cost-effective equipment purchases and operations.

The General Plan indicates that natural gas services are available to all prospective users and nearby major transmission facilities assure availability for most anticipated needs, be they residential, commercial, or industrial. Cost of services varies seasonally and with amount use.

### *Petroleum*

According to the COS Element of the 2017 General Plan, as the costs associated with the use of fossil fuels continue to rise, renewable alternatives such as wind and solar energy will become progressively more desirable and cost effective to develop. Rancho Mirage is well situated to take advantage of the continued emergence and refinement of wind and solar technologies.

## 4.5.4 Project Impact Analysis

### Thresholds of Significance

The following thresholds or criteria are derived from Appendix G of the CEQA Guidelines and are used to determine the level of potential effect. The significance determination is based on the recommended

criteria set forth in Section 15064 of the CEQA Guidelines. For analysis purposes, development of the Porcupine Creek Retreat Specific Plan would have a significant effect on energy resources if it is determined that the project will:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

## Methodology

The analysis in this section is derived from the project-specific California Emissions Estimator Model (CalEEMod) Version 2016.3.2 Modeling Data. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from land use projects. Fuel consumption by construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files. Fuel consumption from construction worker and vendor trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT were then calculated for each type of construction-related trip and divided by the corresponding miles per gallon factor using the USEPA's Greenhouse Gas Equivalency Calculator.

Annual Consumption of electricity and natural gas was calculated using demand factors provided in CAlEEMod also included in **Section 4.7, *Greenhouse Gas Emissions*** of this Draft EIR. Daily Trip Generation used in this analysis was also based on the inputs from CalEEMod, which calculated the annual VMT. Based on the annual VMT, gasoline and diesel consumption rates were calculated for operations.

The primary CalEEMod output created for this analysis includes the Porcupine Creek Retreat Project Buildout Operational Conditions ("Specific Plan Buildout" or "SP Buildout"). This output condition is discussed further below:

### *Porcupine Creek Retreat Project Buildout Operational Conditions ("Specific Plan Buildout" or "SP Buildout")*

The Specific Plan Buildout model corresponds to the operational emissions resulting from project buildout. This includes the proposed improvements of the additional 27 suites/rooms, retreat, facilities, administration and operational buildings, and shade and passive structures. The construction phases include demolition, site preparation, grading, building construction, paving, and architectural coating. The golf course represented in this model is an existing facility predating the project.

Analysis of construction electricity and petroleum use was calculated using the figures provided in the CalEEMod output. The Specific Plan Buildout outputs were used to display the projected operational energy use. The CalEEMod model outputs are provided in **Appendix B.1 and B.2** of this Draft EIR.

This energy analysis obtains certain quantities and values from the separate air quality, greenhouse gas, traffic, and water demand modeling performed for this project. This approach results in output values specific to energy quantification and analysis included herein, which are not meant to substitute or supersede the modeling sources.

## Project Design Features

Energy-saving and sustainable design features, as well as operational programs would be incorporated. Because these features/attributes are integral to the project, and/or are regulatory requirements, they are not considered to be mitigation measures. The project will require submittal to the appropriate agencies discussed in this section for review and approval of on-site design for circulation, building standards and utility installation. Implementation of energy conservation measures discussed in this and other sections of this Draft EIR will help to reduce the impacts on energy resources.

## Project Impacts

### *a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation*

As discussed previously, the Porcupine Creek Retreat project is currently developed as a private estate with multiple recreational amenities. Electricity and natural gas are provided to the project site by Southern California Edison (SCE) the Rancho Mirage Energy Authority (RMEA), and the Southern California Gas Company (The Gas Company or SoCalGas). SCE/RMEA and SoCalGas would continue to serve the project site. Energy resources, including electricity, natural gas and mobility-related petroleum, further discussed in this section.

#### Construction

During construction of the proposed project, energy resources would be consumed in the form of electricity and petroleum. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Electricity consumed is associated with the conveyance of water used for dust control, and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Petroleum-based fuels are associated with the use of off-road construction vehicles and equipment on the project site, construction worker travel to and from the site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown in **Table 4.5.1*, Summary of Energy Use During Construction***, a total of 1,909.4 thousand kilowatt-hours (kWh) of electricity, 44,350.1 gallons of diesel fuel, and 10,444.8 gallons of gasoline are

estimated to be consumed during the construction of the project. Construction of the project is anticipated to be complete in 2022.

**Table 4.5.1 Summary of Energy Use During Construction**

| Fuel Type | Units | Total Project Energy Use |
|---|---|---|
| Electricity | kWh | 1,909.4 |
| Diesel | Gallons | 44,350.1 |
| Gasoline | Gallons | 10,444.8 |

Notes: Electricity for the project is total construction usage. Mobile gasoline and diesel usage were calculated using the figures provided in the CalEEMod model.

### *Electricity*

During construction of the proposed project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, and electronic equipment. Electricity consumed for onsite construction trailers, which are used by managerial staff during the hours of construction activities and other construction activities necessitating electrical power would be provided by SCE/RMEA. As displayed in **Table 4.5.1**, a total of approximately 1,909.4 kWh of electricity is anticipated to be consumed during construction. This is based on the water for dust control, which is calculated from the total days of grading, the acreage disturbed on the project site along with water usage factor per day and a supply water electricity intensity factor. This is further explained in **Table 4.5.2, *Summary of Electricity Use During Construction***, which outlines the amount of electricity consumed during each phase of construction, as determined by the CalEEMod calculations.

**Table 4.5.2 Summary of Electricity Use During Construction**

| Phase | Days Grading | Acres | Electricity Consumed (kWh) |
|---|---|---|---|
| Site Preparation | 5 | 5 | 734.4 |
| Grading | 8 | 5 | 1,175.0 |
| **Total Electricity Consumed** | | | **1,909.4** |

Note: Electricity Consumed is determined by: Days Grading x Acres (acres disturbed during grading) x 3,020 gallons per acre per day (Air and Waste Management Association, 1992) x 0.009727 kWh/gallons (CalEEMod default for Salton Sea Air Basin) is 1,909.4 kWh].

The electricity demand at any given time would vary throughout the construction period based on construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately 0.057 percent of the project's estimated annual operational demand, which, as discussed below, would be within the supply and infrastructure service capabilities of RMEA/SCE. The percentage is delivered by taking the total amount of electricity usage during construction (1,909.4 kWh) and dividing that number by the total amount of electricity during operation (3,293,987 kWh) to obtain 0.057 percent.

### *Natural Gas*

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed in the petroleum subsection. Any minor amounts of natural gas that may be consumed during project construction would be temporary and negligible and would not have an adverse effect on energy resources.

### *Transportation Energy*

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, while VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty equipment used for project construction would rely on diesel fuel, as would haul trucks involved in off-hauling materials from demolition or excavation. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project property in gasoline-powered passenger vehicles. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive that is used for comparable activities or use of equipment that would not conform to current emissions standards (and related fuel efficiencies).

Heavy-duty construction equipment of various types would be used during each phase of construction of the project. CalEEMod was used to estimate construction equipment usage. Fuel consumption from construction equipment was estimated by converting the total CO2 emissions from each construction phase (i.e. demolition, site preparation, grading, building construction, paving, and architectural coating) to gallons using the conversion factors shown in the tables provided.

**Table 4.5.3, *Construction Worker Gasoline Demand***, illustrates the demand of gasoline for construction worker trips to and from the project site. for the various construction phases. Construction worker demand would result in a total demand of 10,444.8 gallons of gasoline.

**Table 4.5.3 Construction Worker Gasoline Demand**

| Const. Phase | Days | Trips | Miles | VMT | KgCO2e | Kg/CO2/ Gallon | Gallons |
|---|---|---|---|---|---|---|---|
| **Demolition** | 20 | 15 | 11 | 3,300 | 1,005.6 | 8.89* | 113.1 |
| **Site Prep.** | 5 | 18 | 11 | 990 | 301.7 | 8.89 | 33.9 |
| **Grading** | 8 | 15 | 11 | 1,320 | 402.3 | 8.89 | 45.3 |
| **Building Const.** | 230 | 117 | 11 | 296,010 | 88,644.7 | 8.89 | 9971.3 |
| **Paving** | 18 | 20 | 11 | 3,960 | 1,162.7 | 8.89 | 130.8 |
| **Arch. Coating** | 18 | 23 | 11 | 4,554 | 1337.1 | 8.89 | 150.4 |
| **Total Construction Worker Gasoline Demand** | | | | | | | **10,444.8** |

*https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

**Table 4.5.4, *Construction Vendor Diesel Demand***, illustrates the demand of diesel fuel for construction vendor trips to and from the project site. These trips are associated with the delivery of construction materials during the construction phase. Construction vendors are estimated to consume 10,918.3 gallons of diesel fuel during project construction.

**Table 4.5.4 Construction Vendor Diesel Demand**

| Const. Phase | Days | Trips | Miles | VMT | KgCO2e | Kg/CO2/ Gallon | Gallons |
|---|---|---|---|---|---|---|---|
| **Demolition** | 20 | 0 | 0 | 0 | 0 | 10.18* | 0 |
| **Site Prep.** | 5 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Grading** | 8 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Building Const.** | 230 | 47 | 5.40 | 58,374 | 111,148.7 | 10.18 | 10,918.3 |
| **Paving** | 18 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Arch. Coating** | 18 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Total Construction Vendor Diesel Demand** | | | | | | | **10,918.3** |

*https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

**Table 4.5.5, *Construction Hauling Diesel Demand,*** illustrates the demand of diesel fuel for construction hauling trips to and from the site during demolition of portions of the site. Construction hauling demand during demolition equals a total of 194.1 gallons of diesel fuel.

**Table 4.5.5 Construction Hauling Diesel Demand**

| Const. Phase | Days | Trips | Miles | VMT | KgCO2e | Kg/CO2/ Gallon | Gallons |
|---|---|---|---|---|---|---|---|
| **Demolition** | 20 | 55 | 20 | 22,000 | 1,976.1 | 10.18 | 194.1 |
| **Site Prep.** | 5 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Grading** | 8 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Building Const.** | 230 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Paving** | 18 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Arch. Coating** | 18 | 0 | 0 | 0 | 0 | 10.18 | 0 |
| **Total Construction Hauling Diesel Demand** | | | | | | | **194.1** |

**Table 4.5.6, *Construction Equipment Diesel Demand***, displays the demand of diesel fuel for constriction vehicles on-site during the various construction phases. Construction equipment diesel demand is expected to 33,237.7 gallons of diesel fuel.

**Table 4.5.6 Construction Equipment Diesel Demand**

| Const. Phase | Days | Equipment Units | KgCO2e | Kg/CO2/ Gallon | Gallons |
|---|---|---|---|---|---|
| **Demolition** | 20 | 6 | 34,240 | 10.18 | 3,363.5 |
| **Site Prep.** | 5 | 7 | 8,426.5 | 10.18 | 827.8 |
| **Grading** | 8 | 6 | 10,505.7 | 10.18 | 1,031.9 |
| **Building Const.** | 230 | 9 | 268,032.1 | 10.18 | 26,329.3 |
| **Paving** | 18 | 8 | 14,854 | 10.18 | 1,459.1 |
| **Arch. Coating** | 18 | 1 | 2,301.7 | 10.18 | 226.1 |
| **Total Construction Equipment Diesel Demand** | | | | | **33,237.7** |

Overall, the project is estimated to consume approximately 10,918.3 gallons of gasoline and 44,350.1 gallons of diesel fuel during project construction. In total, the project will consume 54,794.9 gallons of petroleum during project construction. In the event construction activities are extended over a longer period of time, it is possible that more gasoline would be used for workers traveling to and from the site, but any such increase would be relatively minor, and would not change any of the impact determinations stated in this section. Petroleum use is also necessary to operate construction equipment. The USEPA applied a Tier 3 program in order to reduce the impacts of motor vehicles on air quality and public health. The vehicle emissions standards will reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium duty passenger vehicles, and some heavy-duty vehicles. The construction equipment used for the project will have Tier 3 engines or higher. Additionally, energy used during construction of the project would be limited to the construction period and would not involve long-term petroleum use. As such, energy consumption during construction activities would not be considered excessive, inefficient or unnecessary.

As noted above, there are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or use of equipment that would not conform to current emissions standards (and related fuel efficiencies). Thus, project construction would not consume petroleum in a wasteful or inefficient manner.

## Operation

No adverse effects to nonrenewable energy resources are anticipated with the development of the proposed project. Furthermore, the project would not result in the use of excessive amounts of fuel or electricity and would not result in the need to develop additional sources of energy. As shown in **Table 4.5.7, *Summary of Annual Energy Use During Operation***, the project's new energy demand would be approximately 3,293,987 kWh of electricity per year, 11,716,162 thousand British thermal units, (kBTU) of natural gas per year, and 52,626.5 gallons of petroleum fuel per year. The Specific Plan Buildout outputs are displayed in the table below.

**Table 4.5.7, Summary of Annual Energy Use During Operation**

| Source | Units | Specific Plan Buildout |
|---|---|---|
| Electricity Total | kWh/yr | 3,293,987 |
| Natural Gas Total | kBTU/yr | 11,716,162 |
| Petroleum Total | Gallons | 52,626.5 |

Notes: kWh/year = thousand kilowatt-hours per year; kBTU/yr = thousand British Thermal Units per year. Electricity and Natural Gas for the project is total operational usage. Mobile gasoline and diesel usage were calculated using the figures provided in the CalEEMod calculations.

### *Electricity*

It is anticipated that the project will use electricity during operation of the proposed Retreat. As indicated in **Table 4.5.8, *Operational Electricity Demand***, it is estimated that the entire Specific Plan project would consume approximately 3,293,987 kWh of electricity annually. As mentioned previously, the SCE planning area used approximately 42,405 gigawatt hours (GWh) of electricity in the commercial sector and 34,785 GWh of electricity in the residential sector, for a total of 77,190 in 2018. The total electricity usage in SCE's service area (all sectors) was 104,406.6 GWh in 2018. According to the CEC's Demand Analysis Office, SCE estimates that electricity consumption within SCE's planning area will be approximately 129,000 GWh annually by 2030. Based on the project's estimated new annual electrical consumption of 3,293,987 kWh, the project would account for approximately 0.0025 percent of SCE's total estimated demand in 2030.

**Table 4.5.8 Operational Electricity Demand**

| | Electricity kWh/yr |
|---|---|
| **Land Use** | **SP Buildout** |
| Hotel | 2,487,540 |
| General Office Building | 193,091 |
| Health Club | 242,030 |
| Quality Restaurant | 371,326 |
| Golf Course | 0 |
| Other Asphalt Surfaces | 0 |
| Other Non-Asphalt Surfaces | 0 |
| **Total** | **3,293,987** |

*Source: CalEEMod calculations for the Proposed Project output, which includes the improvements, and the Specific Plan Buildout (SP Buildout), which includes the entire Specific Plan area.*

While the project would result in a long-term increase in demand for electricity, the project would be required to comply with Title 24 and CALGreen requirements related to energy efficiency. Further, submittal, review, and approval of project plans through the City and SCE would ensure future electricity demand would be manageable.

Furthermore, the base plan offered by RMEA to consumers procures 50 percent of its electricity from renewable sources, with an option for 100 percent renewable power also available. The current sources procured by RMEA includes wind, solar, and geothermal sources, which represent the available off-site renewable sources of energy that would help meet the project's energy demand.

### *Natural Gas*

Natural gas would be directly consumed throughout operation of the proposed project, primarily through building heating, water heating, and cooking. Natural gas consumption at the project site was calculated using CalEEMod's default values for hotel, general office buildings, and health club land uses. According to the CalEEMod calculations, the proposed project is estimated to increase natural gas consumption to approximately 8,020,520 thousand British thermal units (kBTU) annually, totaling in 11,716,162 thousand British thermal units (kBTU) of natural gas per year during operation of the Porcupine Creek Retreat. This includes 8,641,440 kBTU consumed by the Hotel land use component, 74,952 kBTU consumed by the General Office Building land use component, 812,250 kBTU consumed by the Health Club land use component, and 2,187,520 kBTU consumed by the Quality Restaurant land use component, as shown in **Table 4.5.9, *Operational Natural Gas Demand***.

**Table 4.5.9 Operational Natural Gas Demand**

| | **Natural Gas Use kBTU/yr** |
|---|---|
| **Land Use** | **SP Buildout** |
| Hotel | 8,641,440 |
| General Office Building | 74,952 |
| Health Club | 812,250 |
| Quality Restaurant | 2,187,520 |
| Golf Course | 0 |
| Other Asphalt Surfaces | 0 |
| Other Non-Asphalt Surfaces | 0 |
| **Total** | **11,716,162** |

*Source: CalEEMod calculations for the Proposed Project output, which includes the improvements, and the Specific Plan Buildout (SP Buildout), which includes the entire Specific Plan area.*
Note: 11,716,162 kBTU/yr is approximately 30,953.8 cf/day per the 1 cf to 1.037 kBTU conversion and 365 days a year.

With the aforementioned calculations, the project would result in a long-term increase in demand for natural gas. However, the project would be designed to comply with Title 24, Part 6, of the CCR, and the City's Sustainability Plan. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas's planning area will be 2,310 million cf per day in 2030 (California Public Utilities Commission, 2018 California Gas Report, pg 103). Therefore, the project would account for approximately 0.0013 percent of the 2030 forecasted consumption in

SoCalGas's planning area (30,953.8 cf/day divided by 2,310 million cf/day) and would use the existing infrastructure. Natural gas consumption would be appropriate and not place a significant burden on SoCalGas services. Further, submittal, review, and approval of project plans through City and SoCalGas would ensure future natural gas demands to be manageable.

### *Transportation Energy*

The consumption and use of petroleum-based fuels related to vehicular travel to and from the project site is anticipated during operation of the Porcupine Creek Retreat Specific Plan project. Currently, travel to and from the property is restricted to the property owner and a limited amount of employees and guests. Operation of the Retreat would add approximately 579,783 vehicle miles traveled annually, based on the increase of 168 daily trips with the operation of the additional 27 keys. This totals to approximately 1,073,672 annual vehicle miles traveled for the entire Porcupine Creek Retreat property (see **Section 4.13**, ***Transportation*** for further analysis). As shown in **Table 4.5.10, *Operational Annual Petroleum***, the project would use approximately 49,146.6 gallons of gasoline per year, and 3,479.9 gallons of diesel per year, for a total of 52,626.6 gallons of petroleum per year.

**Table 4.5.10 Operational Annual Petroleum**

| Fuel Type | Annual VMT | kgCO2e | Kg/CO2/Gallon | Annual Gallons |
|---|---|---|---|---|
| Gasoline | 993,146.6 | 436,913.6 | 8.89 | 49,146.6 |
| Diesel | 80,525.4 | 35,425.4 | 10.18 | 3,479.9 |
| | | | **Total Annual Petroleum** | **52,626.5** |

1,073,672 x 0.925 = 993,146.6; 1,073,672 x 0.075 = 80,525.4

Over the lifetime of the project, the fuel efficiency of vehicles in use is expected to increase as older vehicles are replaced with newer, more efficient models. Thus, the amount of petroleum consumed because of vehicle trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and/or encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control for smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California. As such, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

Although the project would result in an increase in petroleum use during operation compared to the existing conditions, the project-specific petroleum use would be expected to diminish over time as fuel efficiency improves. Additionally, vehicle use on the project site will be restricted to golf cart and pedestrian walkways. Therefore, petroleum use on the project site would not contribute to substantial or excessive consumption.

## Conclusion

To conclude, the project is not anticipated to result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Impacts would be less than significant.

## *b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency*

### Energy Infrastructure and Efficiency

The project site is currently developed as a private estate with multiple recreational amenities. Electricity and natural gas are provided to the project property by Southern California Edison (SCE) and Rancho Mirage Energy Authority (RMEA), and the Southern California Gas Company (The Gas Company or SoCalGas). SCE/RMEA and SoCalGas would continue to serve the project site.

The project is proposing to reposition the property as an exclusive retreat with up to 50 studio, single bedroom and multi-bedroom "keys", and upgrades including a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, upgraded and additional retreat facilities, and a rerouted 18-hole golf course. The development of additional infrastructure is proposed to provide the additional uses with electric and gas utilities. However, since the project site is currently equipped with these utilities, all proposed infrastructure will occur on the project site.

#### *Construction*

##### *Electricity*

As discussed previously, construction activities associated with the project would require relatively minor quantities of electricity for lighting, power tools, and other support equipment. Existing onsite infrastructure would not have to be expanded or newly developed to provide electrical service to the project during construction. Therefore, the project would not result in an increase in demand for electricity during construction that exceeds available supply or could cause significant environmental effects.

New onsite electrical infrastructure would be installed to serve the project site. Construction impacts associated with electrical infrastructure would primarily be confined to trenching and connecting to existing electrical infrastructure. Impacts resulting from the installation of any required electrical infrastructure will be short-term and would cease to occur once the installation is complete. New off-site electricity infrastructure is not anticipated since the site is currently served with electricity.

Furthermore, in accordance with SCE policies, the project applicant would consult with SCE to coordinate electrical infrastructure removals or relocations with site-specific requirements for each planned development. This would ensure that SCE's specific design practices would be implemented as part of the development which would further reduce the project's demand on SCE's electrical infrastructure

during construction as well as avoid any disruption of electrical service to the project site and other surrounding properties. As such, construction of the project is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

### *Natural Gas*

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Therefore, the consumption of natural gas during construction of the project is not anticipated. However, the project would involve the installations of new natural gas connections to serve the additional facilities proposed by the project. Since the project site is currently served by natural gas, it is anticipated that service to the project would not require extensive off-site infrastructure improvements. Similar to the electrical infrastructure, infrastructure developed to support natural gas consumption is anticipated to have relatively short-term impacts and would cease to occur once the installation is complete. With regulatory compliance, impacts would be less than significant.

Additionally, in accordance with SoCalGas policies, the project would consult with SoCalGas to coordinate natural gas infrastructure removal or relocation with site-specific requirements. This would ensure that the existing gas lines would be maintained and secured and not impacted during project construction. This would avoid disruption of gas to the project site or other properties and would further reduce the project's demand on SoCalGas's infrastructure during construction. As such, construction of the project is not anticipated to adversely affect the natural gas infrastructure currently serving the Porcupine Creek property, surrounding area or utility system capacity, and less than significant impacts are anticipated.

## ***Operation***

### *Electricity*

As discussed previously, the project is anticipated to consume approximately 3,293,987 kWh per year, which is approximately 0.0025 percent of the SCE's projected demand in 2030. Therefore, it is anticipated that SCE's existing and planned electricity capacity and electricity supplies would be sufficient to support the project's demand. In addition, energy codes established by the state will be implemented by the project site as an effort to reduce energy consumption and increase energy efficiency at the project site.

### *Natural Gas*

As discussed previously, the project is anticipated to consume approximately 11,716,162 kBTU per year or 11,298,131 cf/year, which is approximately 0.0013 percent of the SoCalGas's projected demand in 2030. Therefore, it is anticipated that SoCalGas's existing and planned electricity capacity and electricity supplies would be sufficient to support the project's demand. In addition, energy codes established by

the state will be implemented by the project site as an effort to reduce energy consumption and increase energy efficiency at the project site.

### Conclusion

Construction and operation of the project would not result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities that could cause significant environmental effects. Therefore, the project's impacts are considered less than significant.

### Consistency Analysis

The project site is located within the City of Rancho Mirage, therefore, local energy efficiency standards within the Rancho Mirage General Plan's Conservation and Open Space (COS) Element is applicable to the project site. The COS Element summarizes the key general plan policies that support the City's goals for conservation, energy use, and management of energy resources. As previously discussed, the project is not anticipated to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Additionally, goals, policies, and programs related to reducing GHG emissions are closely related to reducing energy consumption, through the use of alternative forms of energy or sustainable design features (see **Section 4.7, *Greenhouse Gases*** and **Section 4.10, *Land Use and Planning*** for further consistency with the City's plans and policies as it relates to energy).

Any further details for infrastructure upgrades would be accomplished through the required design review and approval of utility, building design, and circulation plans for the project through the City and the appropriate regulatory agencies and utility providers.

The project is not anticipated to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

## 4.5.5 Cumulative Impacts

The cumulative analysis for the project site considers the geographic context of SCE's service area, SoCal Gas's service area, as well as the Salton Sea Air Basin (SSAB) boundary. Growth within these geographies, partially attributable to the State's emphasis on housing development, is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded facilities.

### Wasteful, Inefficient and Unnecessary Use of Energy

#### *Electricity*

Buildout of the project, related projects, and additional forecasted growth in SCE's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. SCE's planning area consumed approximately 104,406.6 GWh of electricity in 2018. SCE estimates that electricity consumption within SCE's planning area will be approximately 129,000 GWh annually by 2030. As discussed previously, the project is anticipated to consume approximately 3,293,987 kWh per year, which is approximately 0.0025 percent of SCE's projected demand in 2030.

Although project development would result in the use of renewable and nonrenewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be reduced by measures making the project more energy efficient, and would be consistent with growth expectation for SCE's service area. As noted above, this is a conservative estimate as new energy codes for net zero residential development would reduce the overall electricity consumption, and therefore SCE's demand would be reduced by the time of full buildout of the project.

As a part of the 2020 upgrades and additions to the private estate being constructed under its existing entitlements, a new substation will be developed onsite in 2020 to serve the property, including proper rights-of-ways and easements for the structure. This substation is necessary for the private estate's operation and will also provide flexibility for upgraded infrastructure in the future if needed to serve the proposed project. The substation is proposed to be located in the property's northern corner, adjacent to a proposed operations building.

Furthermore, as with the project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate energy design features, as necessary. Therefore, the project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.

### *Natural Gas*

Buildout of the project, related projects, and additional forecasted growth in SoCalGas's service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. Based on the 2018 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas's planning area will be approximately 2,310 million cf per day in 2030. The project would consume approximately 0.0013 percent of the 2030 forecasted consumption in SoCalGas's planning area. SoCalGas forecasts take into account projected population growth and development based on local and regional plans. Although the project would result in the use of natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the project more energy efficient, and would be consistent with regional and local growth expectations for SoCalGas's service area.

Furthermore, future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including CALGreen and State energy standards under Title 24, and incorporate energy design features, as necessary. Therefore, the project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of natural gas would not be cumulatively considerable and, thus, would be less than significant.

### *Transportation Energy*

Buildout of the project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation related fuel in the state and region. The project's estimated operational petroleum-based fuel usage would be approximately 52,626.5 gallons of petroleum fuel per year. By comparison, the SSAB would consume approximately 326,288,400 gallons of total petroleum fuel for 2031. Furthermore, California consumes approximately 26 billion gallons of petroleum per year. The anticipated increase in consumption associated with one year of the project operation is 0.016 percent of the statewide use.

Additionally, as described previously, petroleum accounts for 90 percent of California's transportation energy sources; however, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT, which would reduce reliance on petroleum fuels. According to the CEC, total gasoline per capita has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity.

Additionally, the proposed project would provide guests with amenities that would allow the guests to remain onsite throughout their stay. This would reduce VMTs since guests would not leave the property multiple times a day, compared to residential or resort properties. Therefore, the project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

### *Conclusion*

Based on the analysis provided above, the project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and petroleum-based fuel) would not result in a cumulatively considerable effect related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation. As such, the project's impacts are less than significant.

## Energy Consistency and Capacity

### *Consistency*

The project consists of approximately 191-acres of land situated in the City of Rancho Mirage adjacent to undeveloped natural areas and developed areas. Given the project's consistency with state and City energy reduction goals and objectives, the project's contribution to the cumulative impact relative to energy use would not be cumulatively considerable and would not conflict with any applicable plan, policy, or regulations adopted by an agency for managing energy resources. Similarly, related projects would also be anticipated to comply with these same goals and objectives, Therefore, cumulative impacts with respect to energy resources would be less than significant.

### ***Capacity***

#### *Electricity*

The site is currently served with electrical power from SCE. Electricity infrastructure is typically expanded in response to increasing demand, and system expansions and improvements by SCE are ongoing. SCE would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent with SCE's standards.

As a part of the 2020 upgrades and additions to the private estate being constructed under its existing entitlements, a new substation will be developed onsite in 2020 to serve the estate. The property would provide rights-of-ways and easements for any electrical infrastructure needed to serve the project. This substation is necessary for the private estate's operation and will also provide flexibility for upgraded infrastructure in the future if needed to serve the proposed project.

#### *Natural Gas*

Natural gas infrastructure is typically expanded in response to increasing demand and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary, to meet demand increases within its service area. Development projects within its service area, including the project and related projects also served by the existing SoCalGas infrastructure, would be anticipated to incorporate site-specific infrastructure improvements, as appropriate. Therefore, the project's contribution to cumulative impacts with respect to natural gas infrastructure would not be cumulatively considerable and, thus, would be less than significant.

#### *Conclusion*

Based on the analysis provided, the project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas) would not result in a cumulatively considerable effect related to available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. As such, the project's impacts would not be cumulatively considerable; therefore, cumulative energy infrastructure impacts would be less than significant.

## 4.5.6 Mitigation Measures

No mitigation measures are necessary because all potential impacts would be less than significant. However, project design features, and any Mitigation Measures identified throughout this Draft EIR in **Section 4.2, *Air Quality***, **Section 4.9, *Greenhouse Gases,*** and **Section 4.13, *Transportation*** are relevant in combination to further minimize potential project impacts associated with energy use.

## 4.5.7 Level of Significance After Mitigation

Compliance with existing state, regional, and City regulations, plans, and programs, in addition to the incorporation of the use of energy efficient building materials and design features, would ensure that project impacts related to energy resources would be less than significant. Additionally, submittal, review, and approval of project plans through the City and relevant energy providers would ensure future energy demands would be manageable. Therefore, no significant unavoidable impacts related to energy resources would be caused by the project.

## 4.5.8 Resources


1. California Energy Demand 2018-2030 Revised Forecast, California Energy Commission, Demand Analysis Office, February 2018, accessed April 2020.
2. Corporate Average Fuel Economy, National Highway Traffic Safety Administration, available at https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy, accessed August 2020.
3. Edison International 2019 Sustainability Report, Edison International, 2020, https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf accessed August 2020.
4. Electricity Consumption by Planning Area, California Energy Commission, California Energy Consumption Database, http://www.ecdms.energy.ca.gov/elecbyplan.aspx, accessed April 2020.
5. Greenhouse Gas Equivalencies Calculator – Calculations and References, Environmental Protection Agency, https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references, accessed August 2020.
6. Natural Gas and California, California Public Utilities Commission, https://www.cpuc.ca.gov/natural_gas/, accessed August 2020.
7. Rancho Mirage Energy Authority Website https://ranchomirageenergy.org/, accessed August 2020.

# 4.6 Geology and Soils

## 4.6.1 Introduction

This section describes the existing setting and proposed improvements to the project site that could result in the placement of habitable structures in an area of known geologic hazards. This section is based on the information contained in the Porcupine Creek Retreat Specific Plan regarding proposed land uses; the *Geotechnical Investigation Proposed Operations Complex and New Villas, Porcupine Creek Estate, Rancho Mirage, California;* the *Geotechnical Investigation Proposed New Tennis Courts and Tennis Facilities Building, Porcupine Creek Estate, Rancho Mirage, California;* the *City of Rancho Mirage General Plan 2017, Geotechnical Hazards Section of the Safety Element (Chapter 8), 2017; the County of Riverside Environmental Impact Report No. 521, Cultural and Paleontological Resources (Section 4.9), 2015; Jennings, C.W., Strand, R.G., and Rogers, T.H., 1977, Geologic Map of California: California Division of Mines and Geology, scale 1:750,000; California Department of Conservation EQ Zapp: California Earthquake Hazards Zone Application; Fault Activity Map of California, 2010 (1:750k); USGS Unified Hazard Tool,* and SRI's *Porcupine Creek Cultural Resource Study (June 2020).*

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with geology and soils at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to geology and soils in the Initial Study, the following does not require additional analysis in this Draft EIR.

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

- The Porcupine Creek estate is currently served by sewer. Per the Porcupine Creek Retreat Specific Plan, the project proposes to augment the private network of sewer lines to accommodate new construction. This upgraded interior system will continue to use the existing sewer connection on Dunes View Road in addition to constructing two additional sewer connections to the public sewer system. No septic systems are proposed as part of this project. Therefore, no impacts are anticipated, and no further analysis is necessary.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.6.2 Existing Conditions

### Regional

The Project Site is located within the City of Rancho Mirage, in the Coachella Valley in the County of Riverside. The Coachella Valley is considered the westernmost extension of the Colorado Desert, located south of the Mojave Desert in Imperial, Riverside, and San Diego Counties. The Colorado Desert is bordered by the Peninsular Range and the Pacific Coastal Plain on the west and the Colorado River on the east. The Coachella Valley is bordered on the north and east by the Little San Bernardino, Cottonwood, and Orocopia Mountains, and bordered on the west by the Santa Rosa and San Jacinto Mountains.

The Coachella Valley is semi-arid with seasonal temperature extremes and wind patterns. The mountains reach elevations of 6,000-10,000 feet and create a rain shadow effect in the valley. Due to the rain shadow effect very little precipitation reaches the eastern slopes or the valley floor. The annual average rainfall is 3.2 inches during the winter, with occasional summer tropical storms from the Gulf of Mexico that can result in flash floods. Runoff from the seasonally active streams within washes that empty into the valley quickly sinks into the alluvial fans at the mouths of the canyons.

### Project Site

#### *Topography*

The approximately 191-acre project site is part of the overall 230-acre Porcupine Creek estate property located on the informally named Magnesia Spring Canyon fan and is flanked by an earthen levee to the south and a concrete lined drainage course along the western property boundary. Existing elevations within the property vary from a high of 590 feet above mean sea level (msl) in the southwest to a low of 329 feet above msl at the northernmost point.

The site is designed to drain stormwater to the existing golf course. The golf course retains most of the 100-year storm runoff, with some flow exiting the site via the West and East Magnesia Canyon Channels located on the west and east sides of the site, respectively. The existing topography at the project site is illustrated in **Exhibit 4.6.1, *Existing Topography***.

#### *Soils*

The project site consists of mostly Quaternary alluvium and marine deposits, with Mesozoic granitic rocks, unit 2 (peninsular ranges) across the southeast corner, and pre-Cenozoic metasedimentary and metavolcanic rocks undivided along the southwest corner. In December 2012, Sladden Engineering excavated nine exploratory boreholes in the existing golf course and maintenance yard. Up to 10 feet of fill soil was encountered in each location, underlain by native alluvium, consisting primarily of gravelly

sand with cobbles. Mapped earth units within the development area are listed below, in the order of oldest to youngest:

- Pre-Cenozoic Metasedimentary and Metavolcanic Rocks Undivided: Early Proterozoic to Cretaceous. Undivided pre-Cenozoic metasedimentary and metavolcanic rocks of great variety. Mostly slate, quartzite, hornfels, chert, phyllite, mylonite, schist, gneiss, and minor marble.
- Mesozoic Granitic Rocks, Unit 2 (Peninsular Ranges): Middle Jurassic to Late Cretaceous. Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite.
- Quarternary Alluvium and Marine Deposits: Pleistocene to Holocene. Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine but includes marine deposits near the coast.

## Seismicity and Faulting

### *Faulting*

There are no active faults mapped at the subject site, and the site is not located within a fault-rupture hazard zone as defined by Alquist-Priolo Earthquake Fault Zones Act.

There are several regionally active faults that could produce an earthquake that results in ground shaking at the site. The closest seismically active faults are the San Andreas Fault located 8.0 miles to the northwest and the San Jacinto Fault located approximately 15 miles southwest. There are other regionally active, more distant faults that could produce ground shaking at the site, which include the Elsinore Fault and Brawley Seismic Zone, among others.

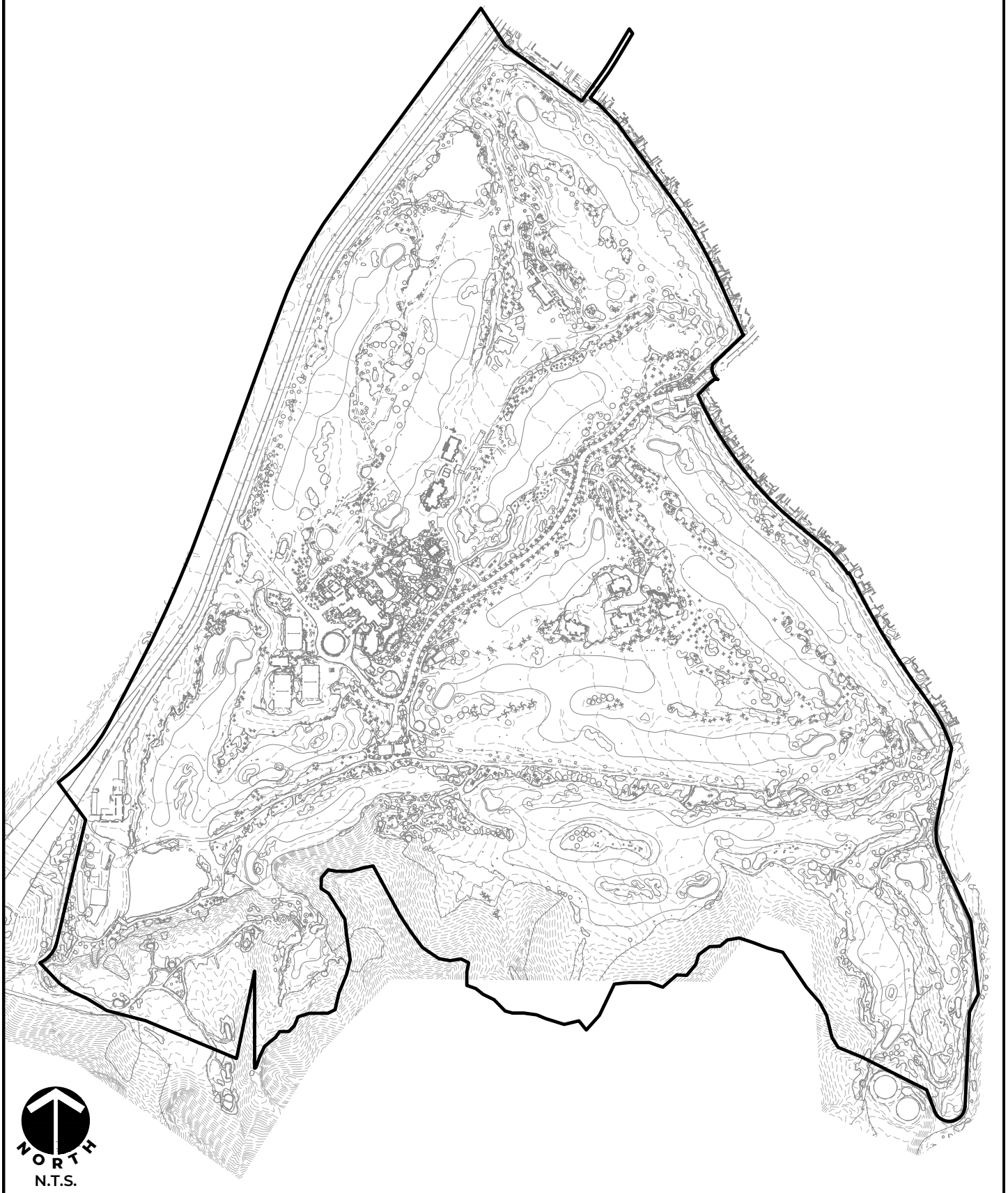
The end of a pre-Quaternary thrust fault is mapped approximately 2,300 feet north of the project site per the 2010, Geologic map of California, Version 2.0 (California Geological Survey 150th Anniversary Edition), Department of Conservation, California Geological Survey, identified as the Santa Ana Thrust Fault in the Rancho Mirage General Plan 2017. Pre-Quaternary faults are faults without a recognized Quaternary displacement or showing evidence of no displacement during Quaternary time (1.6 million years ago to present). Per the Alquist-Priolo Act, an active fault is one that has ruptured in the last 11,000 years.

### *Seismicity*

Southern California is subject to seismic hazards of varying degrees depending on the proximity, degree of activity, and capability of nearby faults. These hazards can be primary (i.e., directly related to the energy release of an earthquake such as surface rupture and ground shaking) or secondary (i.e., related to the effect of earthquake energy on the physical world, which can cause phenomena such as liquefaction and ground lurching). Since there are no active faults at the site, the potential for primary ground rupture is considered very low. The primary seismic hazard for the site is ground shaking.

The City of Rancho Mirage General Plan 2017 provides mapping of potential secondary seismic hazards such as liquefaction susceptibility and earthquake-induced slope instability**. Exhibit 4.6.2, *Areas Susceptible to Liquefaction***, indicates a moderate liquefaction susceptibility. **Exhibit 4.6.3, *Seismically Induced Rock Falls and Landslide Susceptibility,*** indicates three distinct levels across the site; hillside and mountainous areas, numerous rock falls and landslides expected to occur during an earthquake, the areas at the bottom of the foothills have a high susceptibility of being impacted by rock falls and seismically induced landsliding, and the remainder of the site has a moderate susceptibility of being impacted by rock falls and seismically induced landsliding.

The potential for other secondary seismic hazards, such as tsunami and seiche, are considered very low, as the site is located away from bodies of water and at an elevation greater than 50 feet above mean sea level (msl).

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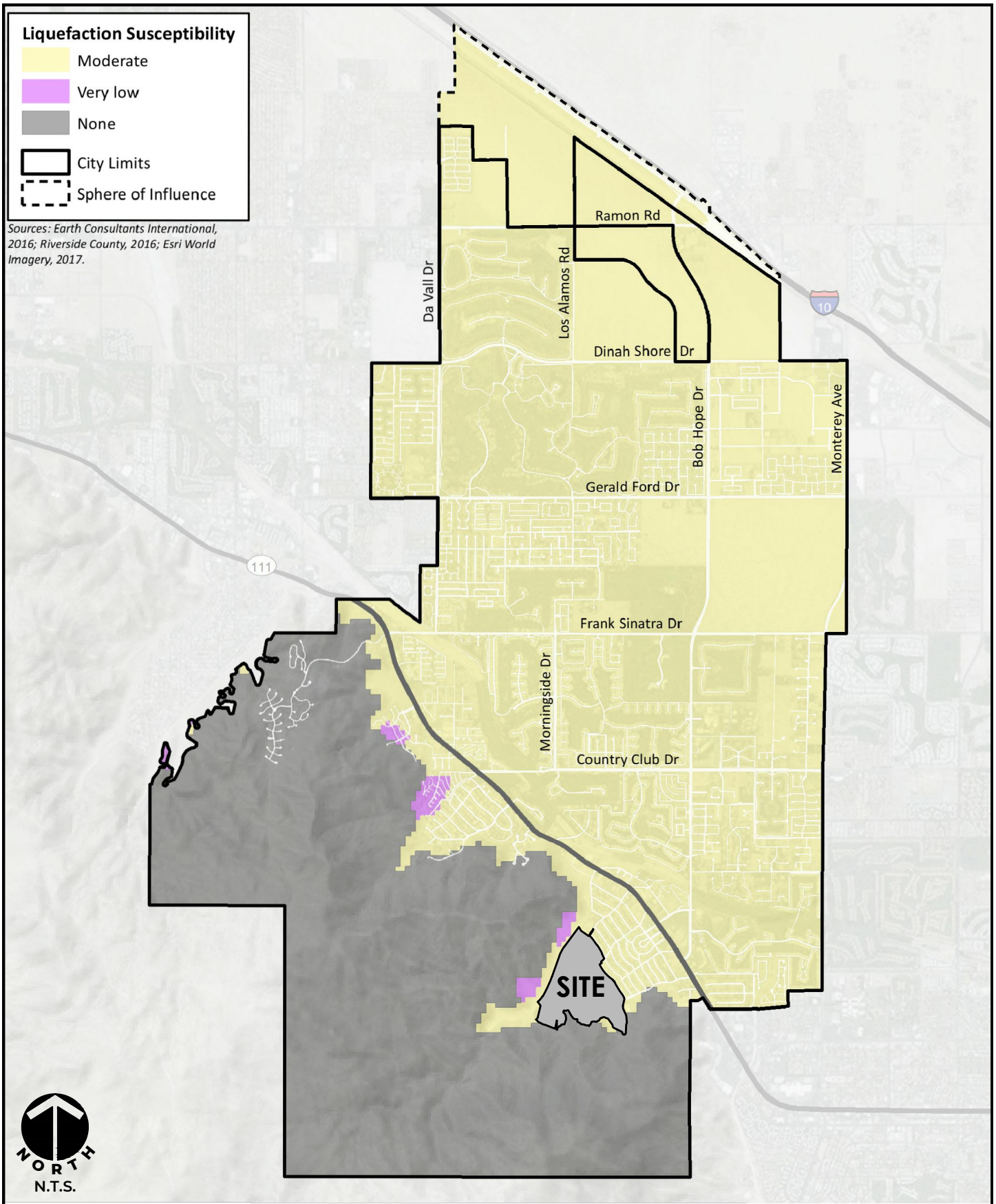
# EXISTING TOPOGRAPHY

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.6.1*

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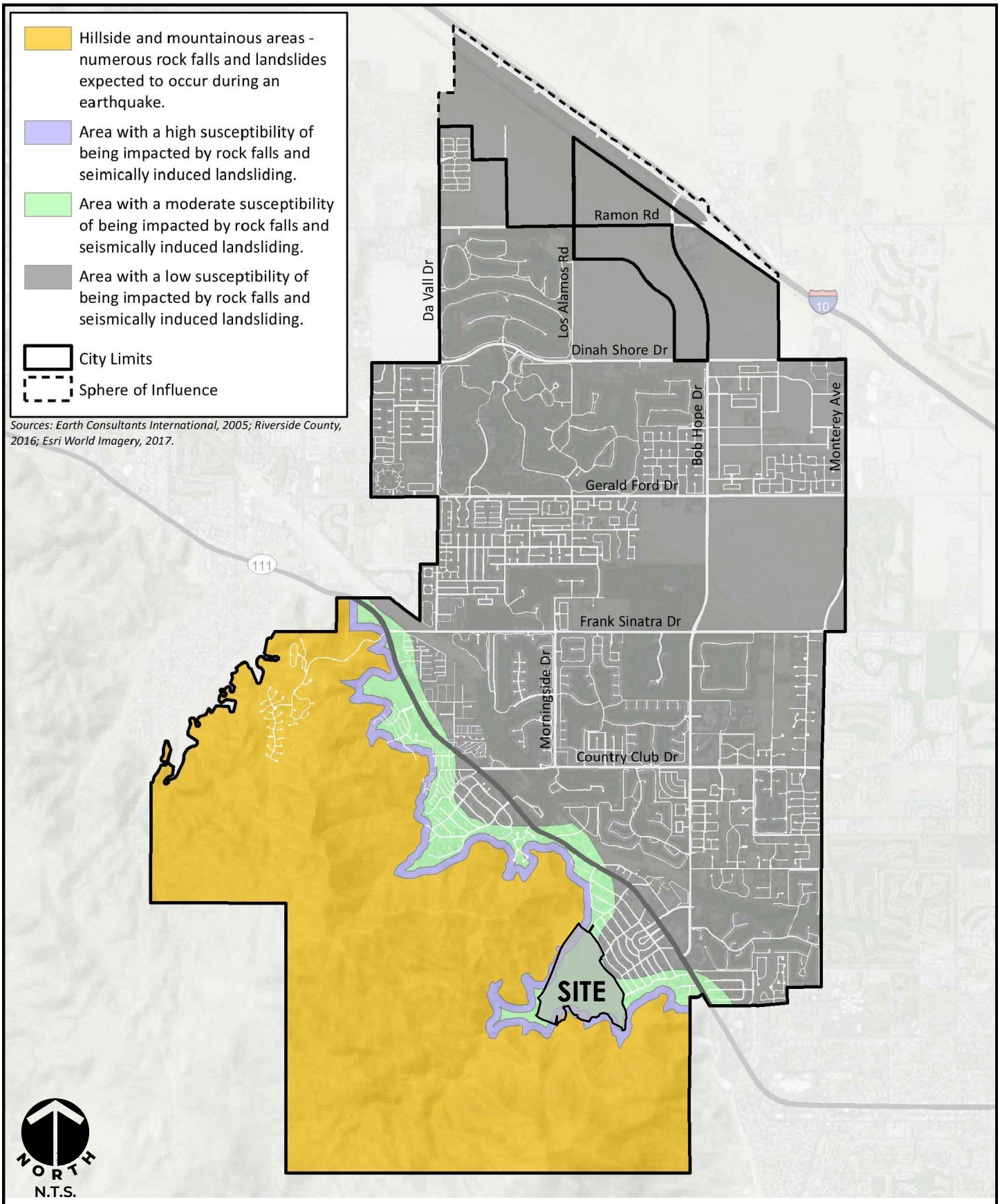
# AREAS SUSCEPTIBLE TO LIQUEFACTION

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
4.6.2

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# LANDSLIDE SUSCEPTIBILITY

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
4.6.3

## 4.6.3 Regulatory Setting

### Federal

#### *National Pollutant Discharge Elimination System*

The National Pollutant Discharge Elimination System (NPDES) was created in 1972 by the Clean Water Act to address water pollution by regulating point sources that discharge pollutants into waters of the United States. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999, lowered the permitting threshold from five acres to one acre.

The NPDES Program has been delegated to the State of California for implementation through the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards.

The project site is located within the Colorado River Basin Regional Water Quality Control Board (Region 7) which covers approximately 20,000 square miles in the southeastern portion of California, including all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. The Colorado River Basin Region is located in the most arid area of California. Despite the relatively dry climate, the Region contains some substantial surface water bodies, including the Colorado River and the Salton Sea. Many of the alluvial valleys in the Region are underlain by ground water aquifers that in many cases are the sole source of water for local areas. The most Regionally important ground water basin underlies the Coachella Valley.

The SWRCB administers the NPDES permit program regulating storm water for construction activities, known as the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, also known as the Construction General Permit. The main compliance requirement of NPDES permits is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for construction projects. SWPPPs identify potential on-site pollutants and establish appropriate storm water best management practices (BMPs) for implementation during grading and construction as well as post-construction BMPs.

### State

#### *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was enacted in 1972 to prohibit the location of developments and structures for human occupancy across the trace of active faults. To assist with this, the State Geologist delineates appropriately wide earthquake fault zones (Alquist-Priolo Zones) to

encompass potentially and recently active traces, which are submitted to city and county agencies to be incorporated into their land use planning and construction policies. A trace is a line on the earth's surface defining a fault, and an active fault is defined as one that has ruptured in the last 11,000 years. The minimum distance a structure for human occupancy can be placed from an active fault is generally fifty feet.

### *Seismic Hazard Mapping Act*

The Seismic Hazards Mapping Act (SHMA) of 1990 directs the Department of Conservation, California Geological Survey to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides and amplified ground shaking. The purpose of the SHMA is to reduce the threat to public safety and to minimize the loss of life and property by identifying and mitigating these seismic hazards.

The SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires.

### *California Code of Regulations, Title 24 (California Building Standard Code)*

The California Building Standards Commission operates within the Department of General Services and is charged with the responsibility to administer the process of approving and adopting building standards for publication in the California Building Standards Code (Cal. Code Regs., Title 24). These regulations include provisions for site work, demolition, and construction, which include excavation and grading, as well as provisions for foundations, retaining walls, and expansive and compressible soils. The California Building Code (CBC) also provides guidelines for building design to protect occupants from seismic hazards.

The City of Rancho Mirage Building Division uses the 2019 CBC in the plan check process and in field inspections. The City's Building Division will use the latest CBC in effect at the time of application for building permits within the Porcupine Creek Retreat project site as applications within planning areas are submitted.

## Regional and Local

### *South Coast Air Quality Management District*

South Coast Air Quality Management District (SCAQMP) is the regulatory agency responsible for improving air quality for Orange County and portions of Los Angeles, San Bernardino, and Riverside

counties, including the Coachella Valley. SCAQMD is responsible for controlling emissions primarily from stationary sources of air pollution, including grading and construction sites. The main source of pollution from grading and construction activities is fugitive dust, which is particulate matter that is suspended in the air by direct or indirect human activities. Two South Coast AQMD rules were adopted with the purpose of reducing the amount of fugitive dust entrained as a result of human activities. Rule 403 applies to any activity capable of generating fugitive dust. Rule 403.1 is supplemental to Rule 403 and applies only to fugitive dust sources in Coachella Valley.

### *Rule 403 – Fugitive Dust*

Rule 403 requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust. This rule also requires activities defined as "large operations" to notify the South Coast AQMD by submitting specific forms. A large operation is defined as any active operation on property containing 50 or more acres of disturbed surface area; or any earth moving operation with a daily earth-moving or throughput volume of 5,000 cubic yards, three times during the most recent 365 day period.

### *Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources*

Rule 403.1 is a supplemental rule to Rule 403 and is applicable to man-made sources of fugitive dust in Coachella Valley. The purpose of this rule is to reduce fugitive dust and resulting $PM_{10}$ emissions from man-made sources in the Coachella Valley. Rule 403.1 requires a Fugitive Dust Control Plan approved by South Coast AQMD or an authorized local government agency prior to initiating any construction/ earth-moving activity. These requirements are only applicable to construction projects with 5,000 or more square feet of surface area disturbance.

The implementation of Rule 403 and Rule 403.1 would control fugitive dust and erosion caused by construction activities. See discussion b. of this section for further analysis.

## ***City of Rancho Mirage Municipal Code***

The Rancho Mirage Municipal Code (RMMC) acts as a regulatory guideline, compliant with state and federal laws, for the City of Rancho Mirage. The RMMC regulates businesses, zoning, animals, vehicles and traffic, peace and morals, health and safety, and more. Regulations regarding geological hazards and safety are discussed within the RMMC in the following chapter:

### *Title 15 Buildings and Construction*

Building, construction, and grading activities for the project would be subject to Title 15 of the Rancho Mirage Municipal Code, which governs the conditions, construction, and maintenance of all property, buildings, and structures within the City. Title 15 is based on the 2019 CBC, which sets minimum design

and standards for construction of buildings and structures that must also meet minimum seismic design standards.

### *City of Rancho Mirage General Plan 2017*

Adopted on November 16, 2017, the City of Rancho Mirage General Plan 2017 guides development within the City to be distinctive, with a strong sense of place reflected through the quality of the man-made environment and the natural setting.

The purpose of the Geotechnical Hazards section of the Safety Element is to provide information, goals, policies, and programs to protect the general health, safety, and welfare of the residents of Rancho Mirage relative to seismic and other geotechnical hazards. It also serves to educate the community about seismic and related geologic hazards.

## 4.6.4 Project Impact Analysis

### Thresholds of Significance

The following standards and criteria have been drawn from Appendix G: Environmental Checklist Form of the CEQA Guidelines. Development of future projects with the Porcupine Creek Retreat Specific Plan site would have a significant effect on soils and geology if it is determined that the project will:

a. Directly or indirectly cause 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. Result in substantial soil erosion or the loss of topsoil?
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Threshold topic "e" is not analyzed further since screening criterion related to the geology and soils for the project concluded that there would be no impacts or less than significant impacts. See 4.6.1, *Introduction,* of this Geology and Soils Section.

## Methodology

Existing Geotechnical Reports and documentation completed for the Porcupine Creek property were used in the analysis of this Geology and Soils Section. Sladden Engineering provided two Geotechnical Reports for the Porcupine Creek estate, one in 2011 and the second in 2012. The 2011 Report investigated the subsurface conditions at the site prior to the construction of the new onsite tennis courts and tennis facilities. The 2012 report analyzed the project property prior to the development of the operations facility and new villas proposed for the Porcupine Creek estate. The purpose of both investigations was to explore the subsurface conditions at the site in order to provide recommendations for foundation design and site preparation. Their conclusions were determined based on their field exploration program, laboratory testing, and engineering analyses, specifically including:

- Site reconnaissance to assess the existing (2011 and 2012) surface conditions on and adjacent to the site.
- Performing laboratory testing on section samples to evaluate their engineering characteristics.
- Reviewing geologic literature and discussing geologic hazards.
- Bore testing

The 2011 Report included bore testing which advanced three exploratory boreholes and three exploratory test pits to refusal depths between approximately 4 feet and 21 feet below ground surface (bgs) in order to characterize the subsurface conditions. Representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses. While the 2012 Report's bore testing included advancing nine exploratory boreholes to depths between approximately 5 feet and 21 feet bgs in order to characterize the subsurface soil conditions. Similar to the 2011 report, representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses.

Additional conclusions and determinations provided in this Geology and Soils Section were derived from state resources and public agency (County and City) documentation. Agency maps illustrating regional and local fault lines and zones, susceptibility to liquefaction, areas susceptible to rockfalls and landslides, and areas of paleontological sensitivity were consulted to analyze the potential impacts of geology and soils present at the project site.

## Project Design Features

Proposed building locations and design will be consistent with applicable state and local construction requirements and standards. Project design features regarding onsite geology and soils are analyzed further in the subsequent discussions of project impacts.

## Project Impacts

### *a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

#### *i. Rupture of a known 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*

Several active faults or seismic zones lie within 62 miles (100 kilometers) of the project site. The primary seismic hazard to the site is strong ground shaking from earthquakes along the San Andreas and San Jacinto faults. The Moment Magnitude ($M_w$) scale is the current, more uniformly applicable, magnitude scale used to measure earthquakes. In particular, for very large earthquakes, moment magnitude gives the most reliable estimate of earthquake size. The Maximum Moment Magnitude ($M_{max}$) is computed using the USGS's online Unified Hazard Tool. $M_{max}$ corresponds to the maximum earthquake believed to be tectonically possible. The controlling fault for the site is the San Andreas Fault, with a maximum moment magnitude of 7.7 $M_W$.

The project site does not lie within a currently delineated State of California, Alquist-Priolo Earthquake Fault Zone. The San Andreas and San Jacinto fault zones are approximately 8 and 15 miles from the project site, respectively, but no major active faults are mapped in the immediate vicinity of the site. **Exhibit 4.6.4, *Alquist-Priolo Earthquake Fault Zones***, illustrates the locations of the San Jacinto and San Andreas Fault in relation to the Porcupine Creek property. Therefore, impacts would be less than significant.

#### *ii. Strong seismic ground shaking*

Seismically induced groundshaking poses the most potentially significant geotechnical hazard to the site. Large earthquakes along regional faults such as the San Andreas and San Jacinto fault zones have the capacity of generating moderate to severe ground shaking in the project area.

There are several factors that determine the effects of ground motion and the degree of structural damage that may occur. These include, but are not limited to: earthquake intensity, distance from the epicenter to the site, composition of soil and bedrock, and building design. As distance from the fault along which the earthquake occurs increases, peak ground accelerations and seismic intensity generally decrease.

While accurate earthquake predictions are not possible, various agencies have conducted statistical risk analyses. The Working Group of California Earthquake Probabilities (WGCEP) estimates a 22 percent conditional probability that a magnitude 7 or greater earthquake may occur between 2014 and 2044 along the Coachella segment of the San Andreas fault.

The primary seismic risks at the project site are from future earthquakes along the San Andreas and San Jacinto faults. Geologists believe that the San Andreas fault has characteristic earthquakes that result from rupture of each fault segment. The estimated characteristic earthquake is of a magnitude 7.7 for the Southern Segment of the fault. This segment has the longest elapsed time since rupture of any part of the San Andreas fault. The last rupture occurred about 1690 AD, based on dating by the USGS near Indio. This segment appears to have also ruptured on about 1020, 1300, and 1450 AD, with an average recurrence interval of about 220 years. The San Andreas fault may rupture in multiple segments, producing a higher magnitude earthquake. The active San Jacinto fault, located southwest of the site, also poses a significant seismic risk to the area.

Engineered design and earthquake-resistant construction incorporated into the project development of homes and resort use related structures would increase the safety and allow for development within seismic-prone areas. The minimum seismic design must comply with the latest edition of the CBC in effect at the time applications for development projects within the project site and incorporate CBC Seismic Coefficients into the design of buildings.

As described above in the Regulatory Setting section, CBC Seismic Coefficients and related criteria based on a Design Basis Earthquake (DBE) are specific to a project locality and are obtained from utilizing the Seismic Coefficient Method (SCM). The SCM is one of the static procedures utilized in the designing of earthquake resistant structures and is based on scientific knowledge, engineering judgement, and compromise of analyzing horizontal and/or vertical forces.

The implementation of Mitigation Measure GEO-1 would ensure project adherence to the Uniform Building Code (UBC) and CBC regulations. The implementation of **Mitigation Measure GEO-2** would require that project applicants adhere to the CBC Seismic Coefficients found in the most recent CBC at the time a project is proposed. Additionally, the preparation and submittal of the project-specific Geotechnical Investigation to the City of Rancho Mirage would ensure the safety and minimal structural damage to buildings during strong seismic ground shaking events; thereby, maintaining consistency with City municipal code. With the implementation of **Mitigation Measures GEO-1** and **GEO-2**, impacts of strong seismic ground shaking at the project property would be reduced to less than significant.

### *iii. Seismic-related ground failure, including liquefaction*

The project site contains materials primarily of alluvial sand and gravel composed of a varied mix of interbedded loose to medium dense, gravelly sand, sand, and silty sand.

#### *Liquefaction*

Liquefaction is the loss of soil strength from sudden shock (usually earthquake shaking), causing the soil to become a fluid mass. In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. Per the City General Plan, the potential for liquefaction to occur at this site is considered moderate. Sladden Engineering performed two geotechnical investigations on the subject property, one dated May 4, 2011, for the tennis courts and facilities building, and one dated December 5, 2012, for the operations complex and new villas. For both investigations Sladden Engineering upon reviewing groundwater maps of the vicinity (>50 feet below ground surface) and generally dense condition of the native alluvial soil underlaying the site determined the risk of liquefaction to be "negligible."

### *Ground Subsidence*

Per the Rancho Mirage General Plan 2017 the potential for seismically induced ground subsidence is considered to be moderate for the project site. Windblown sands and other recently deposited sediments are typically loose and therefore potentially subject to seismically induced settlement. As previously stated, a geotechnical investigation was provided for the project site. Updates to the previously completed soils report may be required to address the proposed habitable buildings. The potential updates to the soils reports is indicated as **Mitigation Measure GEO-3**, which would ensure the safety and minimal structural damage to homes and buildings during seismic-related ground movement. This is technically a standard condition since all construction projects are required to prepare soil analysis; however, because the project is adjacent to a rock fall area (discussed subsequently) the General Plan specifically requires a geotechnical report be prepared prior to project approval, this requirement is satisfied by the previously completed geotechnical investigation, and may be updated for additional habitable structures. Therefore, project impacts associated with seismic-related ground failure, including liquefaction and ground subsidence will be reduced to less significant.

## *iv. Landslides*

Landslides and rockfall can occur when unstable slope conditions are worsened by strong ground motion caused by seismic events. Conditions that lead to landslide vulnerability include high seismic potential; rapid uplift and erosion that creates steep slopes and deeply incised canyons; folded and highly fractured rock; and rock with silt or clay layers that are inherently weak. Development near the base of the mountains within the project site have a high susceptibility to rock falls and seismically induced landsliding as shown in Exhibit 24 in the Rancho Mirage General Plan (**Exhibit 4.6.3, *Landslide Susceptibility***, in this Draft EIR). *Policy Safe 1.7* from the General Plan requires geotechnical analysis of projects subject to landslides with mitigation measures to reduce the hazards to insignificant levels. Habitable structures are not proposed directly adjacent to existing mountain slopes. This preparation of a Geotechnical Report is technically a standard condition since all construction projects are required to prepare soil analysis, however, because the project is adjacent to a rock fall area the General Plan

specifically requires a geotechnical report be prepared prior to project approval, this requirement is satisfied by the previously completed geotechnical investigation, and may be updated for additional habitable structures. Therefore, project impacts associated with potential landslides and rock fall will be reduced to less than significant.

## *b. Result in substantial soil erosion or loss of top soil*

### *Water Erosion*

Climate, topography, soil and rock types, and vegetation are all factors that influence erosion, runoff, and sedimentation. These issues are relevant to future projects to be developed within the project site given the area's topography. Several intermittent drainage courses, including Magnesia Spring Canyon, are tributary to the project site. Storm flows from Magnesia Spring Canyon and drainage courses along the northwest boundary of the site are intercepted by the West Magnesia Canyon Channel. Storm flows from drainage areas along the southern side of the project are conveyed to the East Magnesia Canyon Channel through the existing golf course. The east-west running golf cart path delineates the training dike that directs the storm runoff to the East Magnesia Canyon Channel.

The need for and design of flood control devices and erosion protection is within the purview of the design civil engineer/hydrologist. In general, erosion must be mitigated by proper drainage design including collecting, disposal, and conveyance, at low velocities, of water to approved points of discharge. Proper conveyance of water and discharge quality will be developed for the project site (see **Section 4.9, *Hydrology and Water Quality***) in order to obtain coverage under the Statewide General Construction Permit and the City's National Pollutant Discharge Elimination System (NPDES) Permit. Erosion from rainfall and runoff is problematic because pollutants from heavy equipment or construction related materials, such as sedimentation, diesel, gasoline, oils, grease, solvents, lubricants, or other petroleum products could mix with the water and run offsite.

Prior to site disturbance, an applicant and/or construction contractor may be required to apply to the State Water Resources Control Board (SWRCB) for coverage under the Construction General Permit (Order No. 99-08-DWQ) (CAS000002), which applies to stormwater discharges from projects where clearing, grading, and excavation result in soil disturbance of at least one acre or more. The Construction General Permit requires an applicant to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP includes a list of the BMPs that would be implemented to prevent soil erosion and the discharge of construction-related pollutants that could contaminate nearby water resources. The SWPPP may include, but is not limited to, the following BMPs:

- *Temporary Soil Stabilization:* sandbag barriers, straw bale barriers, sediment traps, and fiber rolls;
- *Temporary Sediment Control:* hydraulic mulch and geotextiles;
- *Wind Erosion Control:* water of the construction site, straw mulch;
- *Tracking Control:* staging/storage area and street sweeping;

- *Non-stormwater Management:* clear water diversion and dewatering; and
- *Waste Management and Materials Pollution Control:* vehicle and equipment cleaning, concrete waste management, and contaminated soil management.

If a SWPPP is required during construction (by the thresholds of the General Permit), a Notice of Intent (NOI) to implement a SWPPP, must be submitted to the State Water Resources Control Board (SWRCB) who will receive it and issue a Waste Discharge Identification (WDID) number. The SWPPP and WDID must be kept on site and used during the life of the project. If required, the implementation of a SWPPP for individual developments within the project site would not result in substantial soil erosion or the loss of topsoil during construction. This issue is discussed further in **Section 4.9, *Hydrology and Water Quality***.

In addition, to control stormwater and irrigation runoff during the post construction period (life of the project), the applicant must also prepare and implement a Water Quality Management Plan (WQMP) for the project site that includes Best Management Practices (BMPs) to be implemented during post construction operations to ensure compliance with Regional Water Quality Control Board (RWCQB) water quality standards. Such WQMP BMP protocol applicable to the project would include the following:

- Education for Property Owners, Operators, Tenants, Occupants, or Employees;
- Activity Restrictions;
- Irrigation System and Landscape Maintenance;
- Street Sweeping Private Streets and Parking Lots; and,
- Drainage Facility Inspection and Maintenance

A WQMP must also include Structural Source Control BMPs specific towards landscape and Irrigation system design, MS4 stenciling and signage and protection of slopes and channels.

### *Wind Erosion*

Wind erosion commonly occurs in areas that are flat and bare, dry and sandy, or in areas with loose, dry, finely granulated soil. Effects of wind erosion include soil loss and the deterioration of soil structure, dryness, loss of nutrients and productivity, air pollution, and sediment transport and deposition. As discussed in **Section 4.2, *Air Quality***, SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through the application of standard Best Management Practices (BMP), such as the application of water or chemical stabilizers to disturbed soils and restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), and cessation of construction activity when winds exceed 25 mph and establishing a permanent ground cover on finished sites. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to

prevent fugitive dust from creating a nuisance off-site. The following measures shall be incorporated into project plans and specifications as implementation of Rule 403:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceeds 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The Contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered at least three (3) times daily during dry weather. Watering, with complete, coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 mph or less.
- If construction exceeds 5,000 square feet or one acre of disturbance, the implementation of the SCAQMD's Rule 403 and SWPPP (respectively) may be required during construction, per Rule 403 and SWPPP code. The implementation of a WQMP during project operation would also be required for the project.

With the implementation of the above plans, the project impacts would be reduced to less than significant.

### c. *Located on geologic unit that is unstable, or become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse*

## Potential for Flooding, Tsunami, and Seiche

As noted in the Water Erosion section above, the project site is protected from upstream flooding by the West Magnesia Canyon Channel and the training dike that diverts flows to the East Magnesia Canyon Channel. The remainder of the golf course is designed to retain the project site's storm runoff. The proposed developments' flood control infrastructure will be designed to safely convey flooding away from the project development and is discussed in further detail in **Section 4.9, *Hydrology and Water Quality***.

The project site is located far inland and not near to any ocean body of water that would be susceptible to a tsunami. Therefore, the project will not be impacted by tsunamis. However, aboveground water tanks are located at the southeastern project boundary. Ground motion from seismic events have the potential to cause periodic oscillation of water contained in the enclosed reservoirs. Its period is determined by the resonant characteristic and physical dimensions of the container. Movement could result in tipping or failure in reservoirs that are not constructed to current standards. The reservoirs are owned and operated by the Coachella Valley Water District (CVWD). To ensure impacts of seismic events, and their secondary effects (including seiches), do not result in the failure of an aboveground water reservoir, building requirements are established for the safe development and maintenance of the storage tanks. Building

requirements include the implementation of appropriate building materials, foundational standards, and loading factors. Further discussion is provided in **Section 4.9, *Hydrology and Water Quality.*** Impacts to seiches at the project site would be less than significant.

### *Potential for Collapsible Soil*

Soil collapse typically occurs in recently (Holocene) deposited sediments laid down by wind or water. When saturated, collapsible soils undergo a rearrangement of their grains and a loss of cohesion, causing the soil to densify from its loose configuration from deposition (hydroconsolidation). The potential for soils to collapse can cause damage to structures. The alluvial deposits in the project site are prone to collapse. The hydroconsolidation potential is commonly mitigated by recompaction of a zone beneath the proposed structure. As previously stated, a geotechnical investigation was prepared for the project property. Updates to the previously completed soils reports may be required to address habitable buildings. These updates are indicated as **Mitigation Measure GEO-3**, which would ensure the safety and minimal structural damage to homes and structures. Therefore, project impacts associated with collapsible soils will be reduced to less significant.

### *Corrosive Soils*

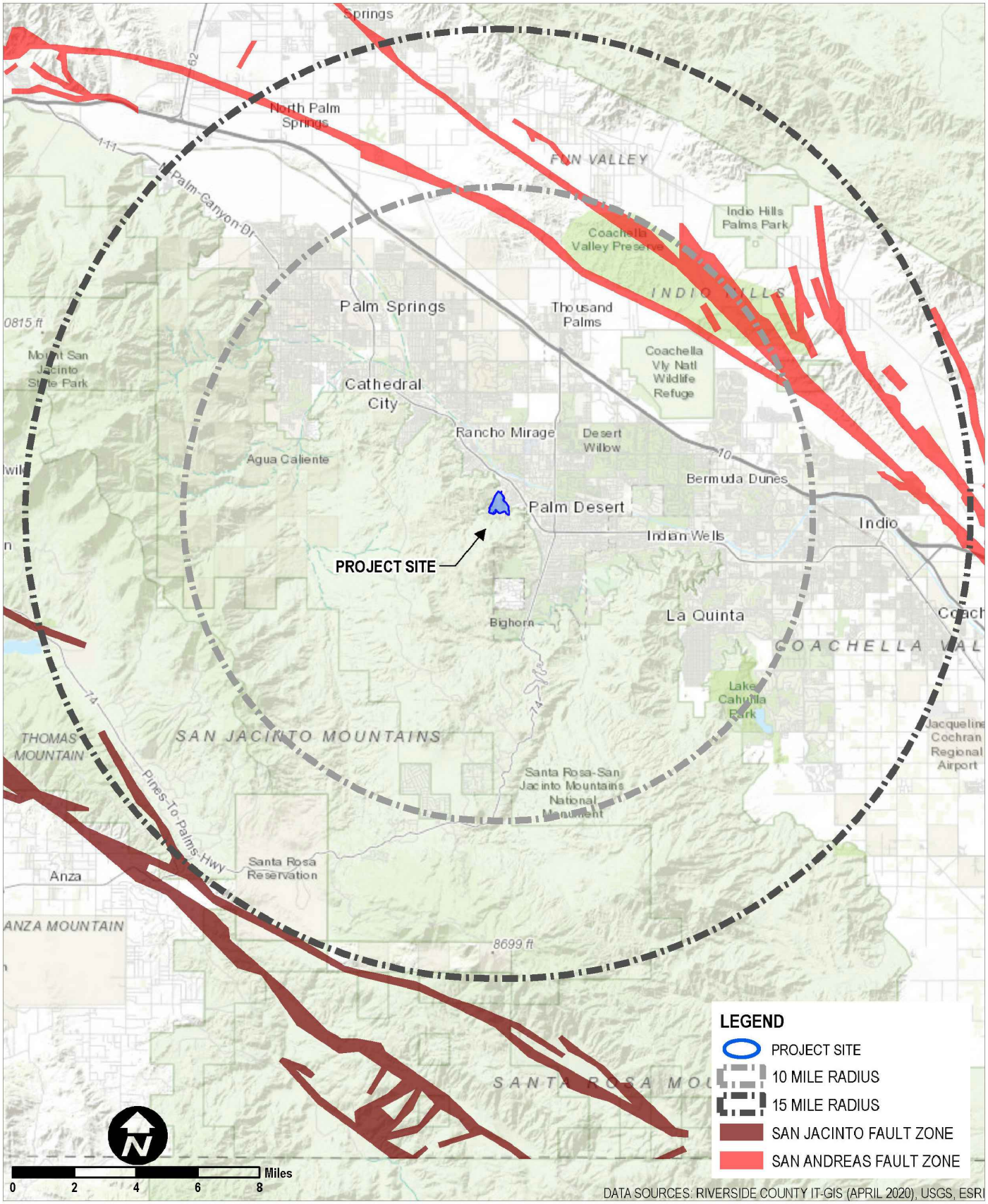
Laboratory testing performed for Sladden Engineering's two geotechnical investigations determined the soluble sulfate concentrations within the site were "negligible". It was recommended that the soluble sulfate content of the surface soil should be reevaluated after grading. Future development within the project site may be subject to **Mitigation Measure GEO-3** requiring an updated soils report, including testing for corrosive soils and mitigation measures should any be encountered. Therefore, project impacts in regard to corrosive soils would be reduced to less than significant levels on a project by project basis as each future development would comply with the findings of the Soils Analysis.

## *d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property*

Varying amounts of fine-grained silts and clays within soils may shrink or swell as moisture content changes, on-site soils are well drained alluvial material. The project site is relatively void of fined grained silts and clays and is situated primarily upon soils that are characterized as gravelly sand. Laboratory testing performed for Sladden Engineering's two geotechnical investigations indicate that the site's expansive potential is "very low" and the risk of structural damage caused by volumetric changes in the subgrade soil is considered "negligible". Therefore, impacts associated with expansive soils are considered less than significant.

## *f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature*

Figure 4.9.3 of the County of Riverside Environmental Impact Report No. 521, Cultural and Paleontological Resources (Section 4.9), *Paleontological Sensitivity*, indicates that the project area has low potential, indicating lands for which previous field surveys and documentation demonstrate as having a low potential for containing significant paleontological resources subject to adverse impacts. Additionally, the project site has been previously disturbed, graded, and developed as residential estate and private golf course. Therefore, impacts associated with paleontological resources are considered less than significant.

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**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
4.6.4

## 4.6.5 Cumulative Impacts

The project area could be adversely impacted by geotechnical hazards. Mitigation measures in the form of CBC compliance and recommendations outlined in a project specific geotechnical investigation during grading and construction will address geotechnical hazards associated with seismic ground shaking, ground failure, liquefaction, subsidence, loss of topsoil, and expansive or corrosive soils. **Mitigation Measure GEO-1** would ensure the project's conformance with current UBC and CBC regulations are implemented; **GEO-2** to ensure the project's adherence to the CBC Seismic Coefficients; **GEO-3** for fulfillment of a updated soils reports for proposed habitable buildings to assess potential hazards; and Policy Safe 1.7 to fulfill the City's requirement regarding landslide hazards. With implementation of the foregoing Mitigation Measures as well as implementation of project specific SWPPPs and a master WQMP, and adherence to goals, policies and programs as identified above, development within the Porcupine Creek Retreat Specific Plan will not cause or contribute to any cumulative impacts associated with geology and soils, and are thus considered to be less than significant.

## 4.6.6 Mitigation Measures

**GEO-1** All structures proposed onsite shall be engineer designed and constructed to earthquake-resistant parameters in compliance with the latest edition of the California Building Code (CBC).

**GEO-2** As future projects are proposed within the project site, design and construction of habitable structures shall adhere to the latest UBC and CBC as required by the City Engineer.

**GEO-3** Updates to the soils report in the existing project-specific geotechnical investigation would be required to address habitable buildings.

**POLICY SAFE 1.7**

Developers of projects in areas identified as being subject to a rockfall or landslide hazard shall prepare detailed geotechnical analysis, including site response to seismic events, and require mitigation measures that reduce associated hazards to insignificant levels.

## 4.6.7 Level of Significance After Mitigation

With implementation of **Mitigation Measures GEO-1** through **GEO-3** and *Policy Safe 1.7*, impacts associated with strong seismic ground shaking, seismic-related ground failure, ground subsidence, collapsible soils and corrosive soils would be reduced to less than significant levels. Mitigation measures will be applied as future projects are proposed within the project site, and the project design and construction of habitable structures must be per the recommendations of each project's Geotechnical Investigation Report as well as the latest UBC and CBC as required by the City Engineer. Responsible parties include each project's geotechnical consultant and the City Engineer or his/her designee.

## 4.6.6 Resources


1. California Department of Conservation EQ Zapp: California Earthquake Hazards Zone Application.
2. City of Rancho Mirage General Plan, Geotechnical Hazards Section of the Safety Element (Chapter 8), 2017.
3. County of Riverside Environmental Impact Report No. 521, Cultural and Paleontological Resources (Section 4.9), County of Riverside, 2015.
4. Fault Activity Map of California, 2010 (1:750k).
5. Geotechnical Investigation Proposed New Tennis Courts and Tennis Facilities Building, Porcupine Creek Estate, Rancho Mirage, California, Sladden Engineering, May 2011.
6. Geotechnical Investigation Proposed Operations Complex and New Villas, Porcupine Creek Estate, Rancho Mirage, California, Sladden Engineering, December 2012.
7. Jennings, C.W., Strand, R.G., and Rogers, T.H., 1977, Geologic Map of California: California Division of Mines and Geology, scale 1:750,000.
8. Porcupine Creek Cultural Resource Study, Statistical Research, Inc., June 2020.
9. USGS Unified Hazard Tool, available at https://earthquake.usgs.gov/hazards/interactive/, accessed June 2020.

# 4.7 Greenhouse Gas Emissions

## 4.7.1 Introduction

The purpose of this section is to discuss the existing greenhouse gas (GHG) conditions in the Coachella Valley and analyze the potential impacts, in terms of GHG emissions, resulting from construction and operation of the Porcupine Creek Retreat Specific Plan. The GHG principles, descriptions and supporting analysis rely on the relevant background research and information made available in various public regulatory and reference documents cited throughout this section.

Reference documentation include sections of the Federal *Clean Air Act* (CWA); *Final 2016 Air Quality Management Plan* (AQMP), by South Coast Air Quality Management District (SCAQMD), March 2017; *Final 2003 Coachella Valley PM10 State Implementation Plan* (CVSIP), by SCAQMD, August 2003; *Analysis of the Coachella Valley PM10 Redesignation Request and Maintenance Plan*, by the California Air Resources Board, February 2010; and sections of the SCAQMD Rule Book; and *California Greenhouse Gas Emissions for 2000 to 2017, Trends of Emissions and Other Indicators*, 2019 Edition, California Air Resources Board; Release No. 18-37 & 19-35, California Air Resources Board Press Release, July 2018 and August 2019.

The findings also rely on the project-specific quantitative results from the California Emissions Estimator Model™ (CalEEMod™), Version 2016.3.2. CalEEMod is a statewide land use emissions computer model developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts, to provide a uniform platform for quantifying potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. To determine the findings of significance, project-specific emissions quantities are compared against SCAQMD's pertinent significance thresholds. The supporting air emissions modeling results referenced herein are provided in the Appendices of this Draft EIR (**Appendix B.1 and B.2**, *Air Emissions Modeling Results*).

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with Air Quality at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR.

## 4.7.2 Existing Conditions

According to the U.S. Environmental Protection Agency (EPA), greenhouse gases (GHG) are a group of gases that trap solar energy in the Earth's atmosphere, preventing it from becoming too cold and uninhabitable. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrochlorofluorocarbons (HCFCs), ozone ($O_3$), hydrofluorocarbons

(HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride ($SF_6$). Carbon dioxide is the most abundant GHG. Carbon dioxide reflects solar radiation back to Earth, thereby trapping solar energy and heat within the lower atmosphere. Human activities (such as burning carbon-based fossil fuels) create water vapor and $CO_2$ as byproducts, thereby impacting the levels of GHG in the atmosphere. Carbon dioxide equivalent ($CO_2e$) is a metric used to compare emissions of various greenhouse gases. It is the mass of carbon dioxide that would produce the same estimated radiative forcing as a given mass of another greenhouse gas. Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial environmental issues in the United States.

GHGs are the result of both natural and anthropogenic activities. With respect to anthropogenic activities, motor vehicle travel, air travel, consumption of fossil fuels for power generation, industrial processes, heating and cooling, landfills, agriculture, and wildfire are the primary sources of GHG emissions. The effects of GHG emissions and concentrations in the atmosphere have resulted in the adoption of governmental policies and regulations on federal, state and local levels that are intended to reduce GHG emissions by development projects, transportation and other activities.

## 4.7.3 Regulatory Setting

### State

#### *California Assembly Bill 32 (AB 32)*

In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Climate Solutions Act of 2006, which required that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that was to be started in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. In November 2007, CARB completed its estimates of 1990 GHG levels and established the amount of 427 million metric tons of carbon dioxide equivalent ($MTCO_2e$) as the total statewide aggregated greenhouse gas 1990 emissions level and 2020 emissions limit.

#### *Senate Bill 32 (SB 32)*

More recently, Executive Order B-30-15 was issued by Governor Brown on April 29, 2015, establishing a new California goal to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 and ensuring the state will continue its efforts to reduce carbon pollution. Most recently, this 40% target was codified through Senate Bill 32 (2016), which adds section 38566 to the Health and Safety Code and requires that CARB ensure statewide GHG emissions meet the 40% reduction target no later than December 31, 2030.

### *Senate Bill 375*

SB 375, signed into law in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. The act requires metropolitan planning organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) that prescribes land use allocation in that MPO's regional transportation plan (RTP). CARB, in consultation with MPOs, provided regional reduction targets for GHGs for the years 2020 and 2035.

### *Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002*

In 2002, recognizing that global warming would impose "compelling and extraordinary impacts" on the state and that motor vehicles are a major source of the state's greenhouse gas emissions, the California legislature adopted AB 1493. Among other things, the bill directed the Air Resources Board (CARB) to adopt regulations that achieve the maximum feasible and cost-effective reduction of greenhouse gas emissions from passenger vehicles, beginning with the 2009 model year. In May 2009, several automakers, California, and the federal government committed to a series of actions to resolve those current and potential future disputes over the standards through model year 2016. The 2009–2012 standards resulted in a reduction in approximately 22% GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30%. In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global warming gases and 75% fewer smog-forming emissions.

## Regional and Local

### *South Coast Air Quality Management District*

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The board letter, resolution, interim GHG significance threshold, draft guidance document and attachments can be found below or under the Board Agenda Item 31 on the December 5, 2008, Governing Board meeting agenda.

### *Rancho Mirage Sustainability Plan*

The City of Rancho Mirage completed the 2013 Sustainability Plan: Leadership in Energy Efficiency (Sustainability Plan) in May 2013. The Sustainability Plan is a framework for the development and implementation of policies and programs that will reduce the City's emissions, working towards the statewide target of 1990 levels by 2020, set by AB 32. For the City to achieve the statewide target of 1990 levels by 2020, it will have to reduce emissions by 54,272 metric tons of carbon dioxide equivalent

($MTCO_2e$), a 19.8 percent reduction. The set of measures presented in the Sustainability Plan will reduce the City's GHG emissions by 60,411 $MTCO_2e$, which exceeds the reduction target by 6,139 $MTCO_2e$ (compared with the target amount of 54,272 $MTCO_2e$).

### *Rancho Mirage Energy Action Plan*

The 2012 Energy Action Plan (ePlan) provides a roadmap of actions within the City's municipal operations, to help reduce energy consumption, to reduce operating costs, and increase energy awareness. The goals focus on three areas: retrofit and expansion of municipal facilities, upgrading the municipal fleet, and consideration of municipal programs and actions that will help reduce municipal and community-wide energy use and greenhouse gas emissions. It focuses on ways the City can reduce costs at the same time as energy efficiency is enhanced. The City developed this plan to move aggressively toward its 10 percent energy reduction target.

### *California GHG Emissions Inventory and Trends*

California's annual statewide GHG emission inventory is an important tool for establishing historical emission trends and tracking California's progress in reducing GHGs. In concert with data collected through various California Global Warming Solutions Act (AB 32) programs, the GHG inventory has been considered critical in demonstrating the state's progress in achieving the statewide GHG target. The inventory provides estimates of anthropogenic GHG emissions within California. CARB is responsible for maintaining and updating California's GHG Inventory.

On July 11, 2018, CARB announced in a press release (No. 18-37) that greenhouse gas pollution in California fell below 1990 levels for the first time since emissions peaked in 2004, an achievement roughly equal to taking 12 million cars off the road or saving 6 billion gallons of gasoline a year. Moreover, according to the CARB report on California Greenhouse Gas Emissions for 2000 to 2017 (published in 2019), which tracks the trends of GHG emissions, California's GHG emissions have followed a declining trend between 2007 and 2017. In 2017, emissions from GHG emitting activities statewide were 424 million metric tons of CO2 equivalent ($MMTCO_2e$), 5 $MMTCO_2e$ lower than 2016 levels and 7 MMTCO2e below the 2020 GHG Limit of 431 $MMTCO_2e$. The largest reductions are attributed to the electricity sector, which continues to see decreases as a result of the state's climate policies. The transportation sector remains the largest source of GHG emissions in the state, but saw a 1 percent increase in emissions in 2017, the lowest growth rate over the past 4 years.

On August 12, 2019, California Governor Gavin Newsom announced in a press release (No. 19-35) that GHG emissions in California continued to fall ahead of schedule in 2017 as the state's economy grew ahead of the national average, according to the California Air Resources Board's latest state inventory of climate-changing emissions. The data also shows that for the first time since California started to track GHG emissions, the state power grid used more energy from zero-GHG sources like solar and wind power than from electrical generation powered by fossil fuels. In addition, the data demonstrates that

emissions from the transportation sector did not rise as fast as in previous years. 2017 was also the second year in a row in which GHG emissions fell below the 2020 reduction target of 431 million metric tons established by the Global Warming Solutions Act of 2006 (Assembly Bill 32). GHG emissions came in at 424 million metric tons of CO2 equivalent in 2017, a decrease of five million metric tons from 2016. The press release also included the following highlights:

Electricity: Emissions from electricity generation made up about 15 percent of 2017 statewide greenhouse gas emissions. In 2017, those emissions fell nine percent from 2016, the largest decline of any economic sector. A large increase in zero-emission energy resources drove the reduction. Those clean sources powered 52 percent of all California's electricity consumed in 2017.

Transportation: Vehicle tailpipe emissions accounted for 37 percent of California's 2017 GHG emissions. Those emissions rose, but showed signs of leveling off. The 2017 increase was 0.7 percent, down from two percent the preceding year. Most of the greenhouse gas emissions increase came from passenger vehicles.

Industry: Industrial emissions over multiple sectors showed a slight reduction or remained flat. California's industrial sectors generated 21 percent of state GHGs in 2017. Oil & gas refineries and hydrogen production were responsible for one-third of those emissions. The rest came mostly from oil & gas extraction, cement plants, glass manufacturers and large food processors.

## 4.7.4 Project Impact Analysis

### Thresholds of Significance

The following thresholds or criteria are derived from Appendix G of the CEQA Guidelines, and are used to determine the level of potential effect. The significance determination is based on the recommended criteria set forth in Section 15064 of the CEQA Guidelines. For analysis purposes, development of the Porcupine Creek Retreat Specific Plan would have a significant effect on greenhouse gas emissions if it is determined that the project will:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

### Methodology

Like the Air Quality section of this document, this GHG analysis relies on the quantitative results of running the most current version of the California Emissions Estimator Model (CalEEMod, Version 2016.3.2), which serves as a statewide platform to calculate criteria air pollutants and greenhouse gas emissions from construction and operation aspects of land development projects. CalEEMod utilizes

widely accepted methodologies for estimating emissions, including but not limited to, the United States Environmental Protection Agency (USEPA) AP-42 emission factors, California Air Resources Board (CARB) vehicle emission models, studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle. In addition, some local air districts provided customized values for their default data and existing regulation methodologies for use for projects located in their jurisdictions. As subsequently explained, the analysis relies on SCAMQD's interim tiered threshold GHG guidance, particularly Tier 3, which establishes a threshold of 3,000 $MTCO_2e$ for non-industrial projects.

## Project Design Features

Project design features regarding greenhouse gases are examined in the following discussions.

## Project Impact

### *a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment*

Project implementation would result in construction and operational GHG emissions. Construction-related GHG emissions will be short-term, while operational emissions will occur throughout the life of the project. At buildout, five emission source categories will contribute either directly or indirectly to operational GHG emissions: energy/electricity usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), and mobile sources.

## Construction GHG Emissions

The California Emissions Estimator Model (CalEEMod), version 2016.3.2, was used to calculate Project-related GHG emissions during the construction phase, and annual operational emissions. The results are summarized in **Tables 4.7.1, *Summary of Construction Greenhouse Gas (GHG) Emissions,*** and **4.8.2, *Summary of Greenhouse Gas (GHG) Emissions,*** and explained below.

Construction of the proposed Project is anticipated to occur in 2021 and 2022 for buildout by 2023. For analysis purposes, all project components have been analyzed concurrently over a single period, as this buildout scenario represents the worst-case scenario conditions compared to a phased implementation. As shown in **Table 4.7.1** project construction would result in a total of 304.0170 $MTCO_2e$. To determine if construction emissions will result in a significant impact, build out GHG emissions were amortized over a 30-year period and added to annual operational emissions to be compared to applicable GHG thresholds (**Table 4.7.2**). Standard emission control requirements were applied to construction.

**Table 4.7.1 Summary of Construction Greenhouse Gas (GHG) Emissions**

| Year | Emissions (MT/yr) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | Total $CO_2e$ |
| 2021 | 302.6199 | 0.0559 | 0.0000 | 304.0170 |
| 2022 | 239.3127 | 0.0404 | 0.0000 | 240.3224 |
| Total Construction Emissions | 302.6199 | 0.0559 | 0.0000 | 304.0170 |
| Construction emissions amortized over 30 years | 10.0873 | 0.0018 | 0.0000 | 10.1339 |

Sources: CalEEMod Version 2016.3.2. Refer to Appendix B of this DEIR for detailed tables.

## Operational GHG Emissions

Operational emissions are attributed to five sources: energy/electricity usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), and mobile sources.

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold of 10,000 $MTCO_2e$/yr that applies to stationary source projects (industrial uses) for which SCAQMD is the lead agency (SCAQMD Resolution No. 08-35). This threshold was adopted based upon an October 2008 staff report and draft interim guidance document that also recommended a threshold for all projects using a tiered approach. It was recommended by SCAQMD staff that a project's greenhouse gas emissions would be considered significant if it could not comply with at least one of the following "tiered" tests:

**Tier 1:** Does the project qualify for any applicable statutory or categorical exemption under CEQA? If yes, no further action is required, and climate change impacts would be less than significant.

**Tier 2:** Is the project consistent with a GHG reduction plan? (The project must be consistent with CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(s).) If yes, there is a presumption of less than significant impacts with respect to climate change.

**Tier 3:** Is the project's incremental increase in GHG emissions below or mitigated to less than the significance screening level (10,000 $MTCO_2e$ per year for industrial projects; 3,000 $MTCO_2e$ for residential projects/commercial projects; 3,500 $MTCO_2e$ for mixed use projects)? If yes, there is a presumption of less than significant impacts with respect to climate change.

**Tier 4:** Does the project meet one of the following standards?

1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined;

2: Early implementation of applicable AB 32 Scoping Plan measures

3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;

Option 3, 2035 target: 3.0 $MTCO_2e$/SP per year for projects and 4.1 $MTCO_2e$ per service population per year for plans

If yes, there is a presumption of less than significant impacts with respect to climate change.

**Tier 5:** Projects should obtain GHG emission offsets to reduce significant impacts. Offsets in combination with any mitigation measures should achieve the target thresholds for any of the above Tiers. Otherwise, project impacts would remain significant.

Under the tiered threshold approach, Tier 3 is the first threshold that can be met by the project and therefore serves as the basis of determining significance.

**Table 4.7.2 Summary of Greenhouse Gas (GHG) Emissions**

| Emission Source | Emissions (MT/yr) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | Total $CO_2e$ |
| Annual construction-related emissions amortized over 30 years | 10.0873 | 0.0018 | 0.0000 | 10.1339 |
| Area Source | 0.0043 | 0.0000 | 0.0000 | 0.0043 |
| Energy Source | 1,725.1543 | 0.0574 | 0.0209 | 1,732.8048 |
| Mobile Source | 471.8358 | 0.0201 | 0.0000 | 472.3390 |
| Waste | 41.9217 | 2.4775 | 0.000 | 103.8592 |
| Water Usage | 592.0555 | 0.3691 | 0.0132 | 605.2073 |
| **Total $CO_2e$ (All Sources)** | **2,924** | | | |
| **SCAQMD Threshold for Non-Industrial Projects** | **3,000** | | | |
| **Threshold Exceeded?** | **NO** | | | |

Sources: CalEEMod Version 2016.3.2. Refer to Appendix B of this DEIR for detailed tables.

As shown in **Table 4.7.2** resulting from the CalEEMod calculations, the proposed project is expected to generate approximately 2,924 $MTCO_2e$ per year from construction, area, energy, mobile sources, waste, and water usage sources. As such, the project GHG emissions would comply with the threshold of significance set at 3,000 $MTCO_2e$ per year. This quantification of the project's GHG emissions is conservative in that it overstates the project's actual GHG emissions because the GHG emissions from

the existing operations of the Porcupine Creek estate property have not been subtracted from the stated totals, even though such emissions are an existing condition and not caused by the project. As indicated by the GHG emissions inventory and trends highlighted in CARB's press release no. 18-37, the regional and statewide strategies are helping California reduce greenhouse gas pollution, which has fallen below 1990 levels for the first time since emissions peaked in 2004, an achievement roughly equal to taking 12 million cars off the road or saving 6 billion gallons of gasoline a year. Having been evaluated against the regionally accepted tiered GHG threshold and found to be consistent, the project will not generate greenhouse gas emissions, directly or indirectly, that have a significant effect on the environment. Therefore, Project impacts related to direct or indirect GHG emissions are considered less than significant.

### *b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases*

As previously mentioned, under Assembly Bill 32 passed in 2006, California must reduce its emissions to 1990 levels (431 million metric tons) by 2020. Senate Bill 32, signed in 2016, requires the state to go even further than AB 32 and cut emissions 40 percent below 1990 levels by 2030—the most ambitious carbon goal in North America. California's primary programs for reducing greenhouse gases to 1990 levels by 2020 are the Renewables Portfolio Standard, the Advanced Clean Cars Program, the Low Carbon Fuel Standard and the Cap-and-Trade Program. Additional programs address a variety of greenhouse gas sources. These include the Short-Lived Climate Pollutants Strategy, the Sustainable Communities Strategy and the Sustainable Freight Action Plan. The 2030 Scoping Plan, adopted by CARB, lays out how these initiatives work together to reduce greenhouse gases to achieve California's 2030 target of 260 million metric tons and also to reduce smog-causing pollutants. This target will require California to more than double the rate at which it has been cutting climate-changing gases. Future reductions will occur against a backdrop of natural sources of GHGs which are increasingly variable because of the climate change California is already witnessing. The SCAQMD adopted the interim GHG significance threshold for stationary/industrial sources on December 5, 2008 which applies to Projects where the SCAQMD is the lead agency.

CARB's statewide GHG emission inventory has tracked California's progress in reducing GHG emissions. On July 11, 2018, CARB announced that greenhouse gas pollution in California had fallen below 1990 levels for the first time since emissions peaked in 2004, an achievement roughly equal to taking 12 million cars off the road or saving 6 billion gallons of gasoline a year. Moreover, the agency findings also indicated a declining GHG emissions trend between 2007 and 2017. In 2017, emissions from GHG emitting activities statewide were 424 million metric tons of CO2 equivalent ($MMTCO_2e$), 5 $MMTCO_2e$ lower than 2016 levels and 7 $MMTCO_2e$ below the 2020 GHG Limit of 431 $MMTCO_2e$. The largest reductions are attributed to the electricity sector, which continues to see decreases as a result of the State's climate policies. The transportation sector remains the largest source of GHG emissions in the

state, but saw a 1 percent increase in emissions in 2017, the lowest growth rate over the past 4 years. The transportation sector, the state's largest source of greenhouse gases, saw a 2 percent increase in emissions in 2016 because of increased fuel consumption. The state has also documented the increased use of biofuels as a result of the state's Low Carbon Fuel Standard. These low-carbon alternative fuels, consisting mostly of biodiesel, renewable diesel, and ethanol, reduced emissions by 14 million metric tons of carbon dioxide, when compared to what would have been generated if conventional fossil fuels had been used.

The City of Rancho Mirage prepared its Sustainability Plan in 2013, which sets programs and policies to help the City reduce greenhouse gas emissions based on AB 32. According to the City's Sustainability Plan, 82 measures have been selected for implementation over the eight years between 2013 and 2020. According to the City's 2012 Greenhouse Gas Inventory, the City would have to reduce emissions by 54,272 $MTCO_2e$ to achieve 1990's levels by the end of 2020. The Greenhouse Gas Inventory has not been updated with new baselines or revised projections, and therefore it is not possible to know if the City has achieved it's AB 32 goals. However, as GHG trends indicate, California has made considerable progress toward the AB 32 goals, which has been possible due to the statewide efforts. Therefore, finding that the project's GHG emissions are lower than the applicable tiered threshold indicates that the project will not interfere with the regional or statewide efforts on GHG emissions and climate change. Less than significant impacts are anticipated.

In summary project implementation is expected to comply with the City GHG reduction strategies contained in the City's Sustainability Plan and SCAQMD regulations. Therefore, the Project would not generate significant levels of GHG emissions, and will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

### 4.7.5 Cumulative Impacts

Amortized construction and operational emissions of the proposed Project would not exceed established SCAQMD thresholds for GHG emissions, therefore, potential cumulative impacts are considered less than significant.

### 4.7.6 Mitigation Measures

The project does not exceed GHG thresholds, therefore no mitigation measures are required.

### 4.7.7 Level of Significance After Mitigation

The project does not exceed GHG thresholds, therefore no mitigation measures are required.

## 4.7.8 Resources

1. Analysis of the Coachella Valley PM10 Redesignation Request and Maintenance Plan, by the California Air Resources Board, February 2010
2. California Greenhouse Gas Emissions for 2000 to 2017, Trends of Emissions and Other Indicators, 2019 Edition, California Air Resources Board; Release No. 18-37 & 19-35, California Air Resources Board Press Release, July 2018 and August 2019
3. Federal Clean Air Act (CWA)
4. Final 2016 Air Quality Management Plan (AQMP), by South Coast Air Quality Management District (SCAQMD), March 2017
5. Final 2003 Coachella Valley PM10 State Implementation Plan (CVSIP), by SCAQMD, August 2003; and sections of the SCAQMD Rule Book

# 4.8 Hazards and Hazardous Materials

## 4.8.1 Introduction

This section describes the existing setting and proposed improvements to the project site that could result in the use, transport or disposal of hazardous materials of on-site or off-site activities. This section also analyzes impacts associated with the project that may potentially affect public health and safety or degrade the environment. The analysis is based on the information contained in the *Porcupine Creek Retreat Specific Plan* regarding proposed land use, as well as public resources provided by the Department of Toxic Substances, the State Water Resources Control Board, and the Environmental Protection Agency. Additional federal, state, and local programs and regulations related to hazards and the use of hazardous materials are referenced in this section.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with hazards and hazardous materials at the project site. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to hazards and hazardous materials in the Initial Study, the following does not require additional analysis in this Draft EIR.

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

- The project is not located within an airport land use plan or private airstrip. The Palm Springs International Airport is located approximately 6.25 miles to the northwest and the Bermuda Dunes Airport is located approximately 7 miles northeast of the project. As a result, the project is located outside each of the airports' influence and planning area. Flights approaching and departing the Palm Springs International Airport and Bermuda Dunes Airport may fly over the City and the project site with intermittent frequency; however, impacts are not anticipated.

Impacts found to be less than significant are further discussed in **Section 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms, definitions, and acronyms used in this Draft EIR.

## 4.8.2 Existing Conditions

### Hazardous Materials

The Code of Federal Regulations (CFR Title 40, Part 261) defines hazardous materials based on ignitability, reactivity, corrosivity, and/or toxicity properties. The State of California defines hazardous materials as substances that are toxic, ignitable or flammable, reactive and/or corrosive, which have the capacity of causing harm or a health hazard during normal exposure or an accidental release. As a result, the use and management of hazardous or potentially hazardous substances is regulated under existing federal, state and local laws.

### *Hazardous Waste*

The United States Environmental Protection Agency (EPA) simply defines hazardous waste as a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from sources ranging from industrial manufacturing process wastes to batteries and may come in many forms, including liquids, solids, gases, and sludges. These can include everyday commercial products, such as pesticides, cleaning fluids, and household sprays, as well as byproducts of manufacturing processes. The EPA has classified hazardous waste into four categories:

- Listed wastes – wastes from common manufacturing and industrial processes, waste from specific industries such as petroleum refining or pesticide manufacturing, and discarded commercial products;
- Characteristic wastes – non-listed wastes that exhibit ignitability, corrosively, reactivity, and toxicity;
- Universal wastes – batteries, mercury-containing equipment, and fluorescent lamps and bulbs; and
- Mixed wastes – radioactive and hazardous waste components.

A hazardous material may become hazardous waste upon its accidental release into the environment. All hazardous wastes must be discharged into a Class I landfill. No Class I landfill is currently operated within Riverside County. Hazardous Waste generated within Riverside County is disposed of off-site, transported to Kern County or Santa Barbra County, where active Class I landfills are located. Some waste is also transported out of the state.

The Riverside County Waste Management Department has a Regional Household Hazardous Waste Collection Program (HHW) that provides household waste collection facilities for residents of the County to dispose of materials at no charge. This type of waste includes, but is not limited to, deodorizers, cleaners, stains, varnishes, car batteries, motor oils and pesticides. The nearest Permanent HHW collection facility is located in Palm Springs at 1100 Vella Road. The Waste Management Department also maintains antifreeze, battery, oil and latex paint (ABOP) collection sites. Adverse environmental impacts can occur when household hazardous materials are disposed

of in unlined sanitary landfills, where these materials may leach through the soil and contaminate groundwater.

Development activities have the potential to encounter previously unknown hazardous materials contamination from historical use of a property. Such contamination can be mediated by existing federal, state, and local policies and procedures implemented by the designated local enforcement agency.

Many types of businesses can be producers of hazardous waste. Small businesses such as dry cleaners, auto repair shops, medical facilities or hospitals, photo processing centers, and metal plating shops are usually generators of small quantities of hazardous wastes. Generators of large quantities of hazardous waste include chemical manufacturers, large electroplating facilities, and petroleum refineries. All significant spills, releases or threatened releases of hazardous materials must be immediately reported.

The Riverside County Environmental Health Hazardous Materials Branch is the sole overseeing agency for hazardous waste generation throughout the County. The purpose of the hazardous waste program is to ensure that hazardous wastes will be properly managed and disposed of in order to protect both people and the environment. The City of Rancho Mirage participates in the Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP), which was most recently updated and adopted by the County of Riverside in 2018 and approved by FEMA that same year. The LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 and identifies the County's hazards, reviews and assesses past disaster occurrences, estimates the probability of future occurrences and sets goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The City of Rancho Mirage used the relevant mitigation strategies listed in the LHMP to outline various goals, policies, and programs within the 2017 Rancho Mirage General Plan Update.

Hazardous wastes require special handling and disposal methods to reduce their potential to damage public health and the environment. Manufacturer's specifications dictate the proper use, handling, and disposal methods for the specific substances. All hazardous waste poses a threat to humans and the environment, and therefore is regulated by federal, state and local programs. In most cases, it is a violation of federal or state law to improperly store, apply, transport, or dispose of hazardous materials and waste.

## Project Site

The Porcupine Creek Retreat project is located on approximately 191-acres of the 230-acre Porcupine Creek private estate in the southern portion of the City of Rancho Mirage. The site is located north, east, and south of the Santa Rosa Mountains, west of the medium density residential, Magnesia Falls Cove neighborhood, south of Rancho Mirage Elementary School, and approximately 0.50 miles west

of Highway 111. The property is currently developed and operates as a private estate. The Porcupine Creek estate includes a main residence and adjacent casitas totaling approximately 25,000 square feet, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and shade structures. Currently, the total building area on the estate is approximately 66,500 square feet. In addition, the owner intends to add two additional villas and a fitness pavilion to the private estate in the next several months, as permitted under the existing entitlements, and these improvements, with related utility improvements, will add approximately 15,000 square feet of additional improvements. The estate grounds also accommodate various private recreational amenities including a 19-hole golf course with a clubhouse building, and a tennis pavilion overlooking three tennis courts. In proximity to the main residence is an elaborate pool and spa area with private spa treatment rooms, a fitness center, and poolside bar. Primary access for guests is located via a manned gatehouse at the Dunes View entry gate. Staff and delivery access are located at Mirage Road which is also gated and manned.

The property was entitled in 1997 and thereafter constructed as a private estate . Since 2011, the property has been remodeled and upgraded to its existing state. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, a fitness center, a gate house, and new villas with an additional approximate 15,000 square feet planned for construction through 2020. Additionally, the landscaping and irrigation at the property has also been rehabilitated and remodeled.

### *Local Schools*

The project site is located within the boundary of the Palm Springs Unified School District. The nearest school is Rancho Mirage Elementary School located north of the property's boundary.

### *Public Airports/Private Airstrips*

The Palm Springs International Airport, located at 3400 East Tahquitz Canyon Way in Palm Springs, is the closest airport to the project property, situated approximately 6.80 miles northwest of the project site. The project site is outside the Airport Land Use Compatibility Zone.

### *Urban/Wildland Interface*

The project site is located adjacent to both undeveloped natural mountain reserves and developed residential dwellings. The natural open space area north, west and south of the project site is associated with the Santa Rosa Mountains and is designated as a Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The southern portion of the larger property (not proposed for development) also lies within the conservation area. Disturbance within the conservation area would be minimal, including compatible uses such as hiking trails.

## 4.8.3 Regulatory Setting

Key federal, state, and local laws, regulations and policies that are relevant to hazards and hazardous materials are summarized below. The regulatory setting establishes a framework for addressing all aspects of hazards and hazardous materials that would be affected by construction and operations of the proposed Porcupine Creek Retreat Specific Plan project.

### Federal Programs

#### *United States Environmental Protection Agency*

The Environmental Protection Agency (EPA) is a national organization with the mission to protect human health and the environment by ensuring that:

- Americans have clean air, land and water;
- National efforts to reduce environmental risks are based on the best available scientific information;
- Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended;
- Environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry and international trade, and these factors are similarly considered in establishing environmental policy;
- All parts of society – communities, individuals, businesses, and state, local and tribal governments – have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
- Contaminated lands and toxic sites are cleaned up by potentially responsible parties and revitalized; and
- Chemicals in the marketplace are reviewed for safety.

The EPA accomplishes their mission by developing and enforcing regulations, providing grants, studying environmental issues, sponsoring partnerships, publishing information, and educating people about the environment.

According to the EPA, hazardous wastes are characterized as wastes that exhibit any one or more of the following characteristic properties: ignitability, corrosivity, toxicity, or reactivity. The EPA also contains a list of hazardous materials and procedures when dealing with hazardous waste and materials. Various rules regulate the use, storage, transportation and disposal of hazardous materials.

A waste is determined to be hazardous if it is specifically listed on one of four lists (the F, K, P and U lists) found in title 40 of the Code of Federal Regulations (CFR) in Section 261 and discussed in further detail below:

- **The F-list** identifies wastes from common manufacturing and industrial processes as hazardous from non-specific sources (40 CFR Section 261.31). They can be divided into seven groups depending on the type of manufacturing or industrial operation that creates them. These groups include spent solvent wastes, electroplating and other metal finishing wastes, dioxin-bearing wastes, chlorinated aliphatic hydrocarbons production, wood preserving wastes, petroleum refinery wastewater treatment sludges, and multisource leachate.
- **The K-list** identifies hazardous wastes from specific sectors of industry and manufacturing and are considered source-specific wastes. To qualify as a K-listed hazardous waste, a waste must fit into one of the following industries: wood preservation, organic chemicals manufacturing, pesticides manufacturing, petroleum refining, veterinary pharmaceuticals manufacturing, inorganic pigment manufacturing, inorganic chemical manufacturing, explosives manufacturing, iron and steel production, primary aluminum production, secondary lead processing, ink formulation, and coking (processing of coal to produce coke).
- **The P and U lists** designate as hazardous waste pure and commercial grade formulations of certain unused chemicals that are being disposed. For a waste to be considered a P- or U-listed waste it must meet the following three criterias: (1) the waste must contain one of the chemicals listed on the P or U list; (2) the chemical in the waste must be unused; and (3) the chemical in the waste must be in the form of a commercial chemical product. The P-list identifies acute hazardous wastes from discarded commercial chemical products, while the U-list identifies hazardous wastes from discarded commercial chemical products.

More recent EPA efforts and responsibilities for managing hazardous waste includes the management of wastes from homeland security incidents. The Waste Management for Homeland Security Incidents Act requires EPA to provide technical support to federal, state, local, and tribal authorities on waste management and cleanup efforts resulting from natural disasters, terrorist attacks, major accidents, and disease outbreaks. EPA's main responsibility is to promote pre-planning efforts to deal with hazardous waste disasters and encourage various stakeholders to prepare for natural and man-made disasters. EPA is also required to review emergency response plans for federal agencies, and participate in exercises with federal, state, local and tribal emergency responders.

### *Resource Conservation and Recovery Act*

The EPA has the authority and responsibility to regulate hazardous waste by the Resource Conservation and Recovery Act of 1976 (RCRA). Through RCRA, EPA is responsible for monitoring the generation, transportation, treatment, storage, and disposal of hazardous waste. Amendments to RCRA, including the 1984 Federal Hazardous and Solid Waste Amendments, and those established in 1986, forced EPA to increase enforcement of underground storage tanks for petroleum and other hazardous substances, focus on waste minimization programs, such as phasing out hazardous wastes from landfills, and finally mandating corrective measures regarding the release of hazardous waste.

More recent EPA efforts and responsibilities for managing hazardous waste include management of wastes from homeland security incidents. The Waste Management for Homeland Security Incidents Act requires EPA to provide technical support to federal, state, local, and tribal authorities on waste management and cleanup efforts resulting from natural disasters, terrorist attacks, major accidents, and disease outbreaks. EPA's main responsibility is to promote pre-planning efforts to deal with hazardous waste disasters and encourage various stakeholders to prepare for natural and man-made disasters. EPA is also required to review emergency response plans for federal agencies, and participate in exercises with federal, state, local and tribal emergency responders.

### *Hazardous Materials Transport Regulations*

The United States Department of Transportation (DOT) was established on October 15, 1996 by Congress. The U.S. DOT's purpose is to ensure the safest, most efficient and modern transportation system is provided to improve the quality of life of people and communities and increase the productivity and competitiveness of workers and businesses in the nation.

The Pipeline and Hazardous Materials Safety Administration's (PHMSA) Office of Hazardous Materials Safety is a component of the U.S. DOT that carries out a national safety program, including security matters, to protect against the risks to life and property inherent in the transportation of hazardous materials in commerce by all transportation modes. This is accomplished by developing, proposing and implementing regulatory policy initiatives and regulations governing the safe and secure transportation of hazardous materials. The PHMSA conducts safety inspections and investigations to ensure transportation safety and security by conducting compliance inspectors and incident and accident response and investigations.

### *Comprehensive Environmental Response, Compensation, and Liability Act*

The Comprehensive Environmental Response, Compensation, and Liability Act, otherwise known as CERCLA or Superfund, was established to provide a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

The EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, the EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The EPA also recovers costs from financially viable individuals and companies once a response action has been completed. Superfund site identification, monitoring, and response activities in states are coordinated through state environmental protection or waste management agencies.

### *Superfund Amendments and Reauthorization Act*

The Superfund Amendments and Reauthorization Act (SARA) or 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

### *Emergency Planning and Community Right-To-Know Act*

The Emergency Planning and Community Right-To-Know Act (EPCRA) was enacted in 1986 by Congress as national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. Congress requires each state to appoint a State Emergency Response Commission (SERC) as a part of EPCRA. The SERCs are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. The EPCRA requires industry to report on the storage, use and releases of hazardous substances to federal, state, and local governments.

### *Clean Water Act*

The Clean Water Act (CWA) was established in 1972 as the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the EPA has implemented pollution control programs such as setting wastewater standards for industries. The EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

It is unlawful under the CWA to discharge any pollutant from a point source, which is a discrete conveyance such as pipes or man-made ditches, into navigable waters unless a permit was obtained. The National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Compliance monitoring under the NPDES Program encompasses a range of techniques in order to address the most significant problems and to promote compliance among the regulated community.

### *EPA Enforcement and Compliance History Online*

EPA's Enforcement and Compliance History Online (ECHO) is a national database that focuses on inspection, violation, and enforcement data for the Clean Air Act (CAA), Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) and also includes Safe Drinking Water Act (SDWA) and Toxics Release Inventory (TRI) data. ECHO can be used to search for facilities, investigate pollution sources, search for EPA enforcement cases, examine and create enforcement-related maps, and analyze trends in compliance and enforcement data.

## State Programs

### *Hazardous Waste Control Law*

The Hazardous Waste Control Law (HWCL) is the primary hazardous waste management system in the State of California. The HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning, and as much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of waste management activities that are not covered by federal law with the RCRA.

### *Tanner Act*

Although there are numerous state policies dealing with hazardous waste materials, the most comprehensive is the Tanner Act (AB 2948) that was adopted in 1986. The Tanner Act governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities in the State of California. The act also mandates that each county adopt a Hazardous Waste Management Plan. To be in compliance with the Tanner Act, local or regional hazardous management plans need to include provisions that define (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to state available for certain local decisions.

### *California Environmental Protection Agency*

As a branch under the EPA, the California Environmental Protection Agency (CalEPA) has broad jurisdiction over hazardous materials management in the State of California. CalEPA's mission to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality is achieved by developing, implementing and enforcing environmental laws. These laws regulate air, water, and soil quality, pesticide use, and waste recycling and reduction. CalEPA oversees and coordinates with the Air Resources Board (ARB), Department of Resources Recycling and Recovery (CalRecycle), Department of Pesticide Regulation (DPR), Department of Toxic Substances Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB) to improve California's environment.

### *Department of Toxic Substance Control*

DTSC is responsible for protecting public health and the environment from hazardous waste generated in California. It regulates under the authority of the federal RCRA of 1976 and the California Health and Safety Code. DTSC operates a variety of programs including the following:

- Overseeing cleanups at improperly managed waste sites.

- Ensuring those who generate, handle, transport, store and dispose of hazardous waste do so properly.
- Enforcement actions against those who fail to manage hazardous waste appropriately.
- Exploring and promoting pollution prevention and encouraging reuse and recycling.
- Evaluating soil, water and air samples at sites and developing new analytical methods.
- Practicing other environmental sciences, including toxicology, risk assessment, and technology development.
- Involving the public in DTSC's decision-making.

Within CalEPA, the Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for hazardous waste management and cleanup to protect California and Californians from exposures to hazardous wastes. The DTSC achieves this by regulating hazardous waste and discovering ways to reduce its production in California. Enforcement of regulations for the generation, transport, and disposal of hazardous materials are delegated to local jurisdictions, in agreements with the DTSC. The DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA of 1976 and the California Health and Safety Code.

DTSC is required to compile and update each year, or as appropriate, a list of hazardous waste sites pursuant to the Cortese Lists under Government Code Section 65962.5(a). DTSC has created the EnviroStor database of properties throughout California that may be contaminated.

### *EnviroStor*

EnviroStor is a database maintained by the State of California DTSC. The EnviroStor database identifies sites with known contamination or sites for which there may be reasons to investigate further. It includes the identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. A search of the EnviroStor database completed in March 2020 showed no listed or hazardous waste sites on the project site.

## ***Government Code Section 65962.5 (Cortese List)***

The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop an updated Cortese List annually, at minimum. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

### *State Water Resources Control Board*

SWRCB is responsible for regulating wastewater discharges to surface waters and groundwater. This includes discharges from all construction, industrial, municipal, and agricultural activities. The SWRCB delegates these responsibilities to various regional water quality control boards throughout California.

#### *GeoTracker*

GeoTracker is a database maintained by the State of California Water Resources Control Board that provides online access to environmental data. It serves as the management system for tracking regulatory data on sites that can potentially impact groundwater, particularly those requiring groundwater cleanup and permitted facilities, such as operating underground storage tanks and land disposal sites.

### *Hazardous Material Management Plans*

In January 1996, CalEPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories. The program is implemented at the local level by a local agency, the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

### *California Hazardous Material Release Response Plan and Inventory Law*

Chapter 6.95 of the Health and Safety Code (HSC) requires that in order to protect the public health and safety and the environment, it is necessary to establish business and area plans relating to the handling and release or threatened release of hazardous materials (Article 1), as well as implement regulations regarding hazardous material management (Article 2), emergency planning and Community Right-to-Know Act of 1986 (Article 3) and the California Toxic Release Inventory Program Act of 2007 (Article 4).

### *California Emergency Response Plan*

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is managed by the California Governor's Office of

Emergency Services, which coordinates the responses of other agencies, including CalEPA, California Highway Patrol (CHP), RWQCB, and the Riverside County Emergency Management Department.

### *California Occupational Safety and Health Administration*

The Division of Occupational Safety and Health (DOSH), better known as Cal/OSHA, protects workers from health and safety hazards on the job in almost every workplace in California through its research, standards, enforcement, and consultation programs. Cal/OSHA enforces complaint and accident investigations, targeted and programmed inspections, citations, special orders and orders to take special action, orders prohibiting use, as well as permits, certifications, licenses, approvals, and classification.

### *California Department of Forestry and Fire Protection*

The California Department of Forestry and Fire Protection (CAL FIRE) protects over 31 million acres of California's privately-owned wildlands and provides varied emergency services in 36 of the state's 58 counties via contracts with local governments. The department's Fire Protection Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education, and law enforcement. Typical fire prevention projects include brush clearance, prescribed fire, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities. CAL FIRE provides Fire Hazard Severity Zone Maps for State Responsibility Area lands and Very High Fire Hazard Severity Zone Maps for Local Responsibility Area lands for each county in California. These maps allow state and local agencies to identify areas susceptible to wildfire hazards.

### *California Certified Unified Program Agencies*

The California Certified Unified Program Agencies (CUPA) is a collection of state and regional agencies in charge of regulating hazardous waste. They are responsible for the administration, permits, inspection and enforcement of various environmental and emergency management programs, including the Underground Storage Tank Program, the Aboveground Petroleum Storage Act Program, Hazardous Materials Release Response Plans, and Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs. The California Environmental Protection Agency (CalEPA) is responsible for administrating and certifying the CUPA's. Two state agencies that are also heavily involved with CUPA activities include the California Department of Toxic Substances Control (DTSC) and the State Water Resource Control Board (SWRCB).

## Regional and Local Programs

### *Regional Water Quality Control Board*

The State Water Resources Control Board (SWRCB) is responsible for regulating wastewater discharges to surface waters and groundwater. This includes discharges from all construction, industrial, municipal, and agricultural activities. The SWRCB delegates these responsibilities to various Regional Water Quality Control Boards (RWQCB) throughout California. The RWQCB acts under Cal EPA and is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those hazardous material, waste, and toxic-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 that are applicable to hazardous materials.

The City of Rancho Mirage falls under the jurisdiction of the Colorado River Basin Regional Water Quality Control Board. The Colorado River Basin RWQCB is responsible for overseeing corrective actions associated with leaks and improper disposal from underground storage tanks, such as gas station tanks, and provides assistance to County of Riverside Department of Environmental Health on underground storage leaks.

### *Riverside County Department of Environmental Health*

The Riverside County Department of Environmental Health (DEH) provides programs and services related to protecting public health, safety and the environment. Within the DEH are two divisions, District Environmental Service, and Environmental Protection and Oversight. The Environmental Protection and Oversight Division (EPO) is responsible for handling and regulating hazardous materials, land use, water systems, underground storage tanks, solid waste and business emergency plans and is responsible for managing a list of all hazardous waste generators in the County. In the City of Rancho Mirage such generators of hazardous waste include golf courses, gas stations, dry cleaners, grocery stores, car dealerships and the City's maintenance facility yard.

### *Riverside County Hazardous Materials Management Division*

The Riverside County DEH's Hazardous Materials Management Division was designated as the Riverside County Certified Unified Program Agency (CUPA). As CUPA for Riverside County, the Division manages the following elements of the Unified Program:

- Hazardous Waste Generators
- Hazardous Materials Business Plan Program (HMBP) and the Hazardous Materials Release Response Plan and Inventory Program
- Hazardous Materials Emergency Response Team
- Risk Management Prevention Program
- Underground Storage Tank (UST) Program
- Aboveground Petroleum Storage Act (APSA) Program

### *Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan*

The Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) identifies the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The Riverside County LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistants, Pre-Disaster Mitigation and Hazard Mitigation Grant Programs.

### *Riverside County General Plan*

According to the Safety Element of the Riverside County General Plan, hazardous materials include the entire spectrum of such substances from pre-product materials to waste. Laws and regulations that govern hazardous materials, and how they are stored, transported, and handled distinguish between hazardous materials and hazardous waste. For regulatory purposes, hazardous materials are defined as manufactured hazardous items and materials, as well as the pre-product hazardous substances used to create them. These materials, both pre- and post-production, are subject to extensive management for safety requirements. The waste generated by, or resulting from, the production that process becomes hazardous waste, which must be safely disposed of in an appropriate manner.

The Riverside County General Plan emphasizes the County's susceptibility to natural hazards such as fires, in particular, the hillside terrain of Riverside County. Fire potential for Riverside County is typically greatest in the months of August, September and October, when dry vegetation is paired with the dry Santa Ana winds. To minimize the potential for disastrous loss of structures and life (human and wildlife), a coordinated program to manage development in the hazardous areas has been identified in the Safety Element of the County General Plan.

### *City of Rancho Mirage General Plan*

The Safety Element in the Rancho Mirage General Plan (RMGP) addresses natural and manmade environmental hazards that may occur in the City. The Element provides goals, policies and programs to protect the general health, safety and welfare of the community from hazardous and toxic materials events. According to the Rancho Mirage General Plan, the City maintains a Multi-Hazard Functional Plan that address the planned response to extraordinary emergency situations associated with natural or human caused disasters, technological incidents, and nuclear defense operations.

The Hazardous and Toxic Materials section within the Safety Element identifies existing hazardous and toxic material locations in the community and describes the regulatory environment established to safely manage the materials. According to the RMGP, a wide variety of products, chemical and purified chemical compounds, and elements that are considered hazardous or toxic are used in

households, commercial businesses, and industrial operations and processes. Some examples are home and pool related chlorine products, chemical fertilizers, herbicides and pesticides, stored fuels and waste oil, chemical solvents and lubricants, and a variety of medical materials.

The continued safety of Rancho Mirage residents and visitors through the regulation of the manufacture, transport, use, and disposal of toxic and hazardous materials is Goal Safe 5, in the 2017 General Plan Update. Under this goal are various policies and programs that support this goal. Some policies and programs include:

- Policy SAFE 5.2: The City shall require and facilitate the safe and responsible disposal and cleanup of all hazardous and toxic waste and waste sites in Rancho Mirage and the Sphere of Influence (SOI).
- Program SAFE 5.2A: The City shall coordinate with the appropriate state and federal agencies to activate procedures for the cleanup of existing and future hazardous and toxic waste sites.
- Policy SAFE 5.3: The City shall coordinate with the Fire and Sheriff's Department to develop a system for roadway management and for alerting emergency and medical facilities to the impending transport of hazardous and toxic materials.

### *City of Rancho Mirage General Plan Environmental Impact Report*

The Rancho Mirage General Plan Environmental Impact Report (EIR) addresses the environmental effects associated with the implementation of the proposed City of Rancho Mirage 2005 General Plan. The EIR was prepared to provide objective, factually supported, full disclosure analysis of the environmental consequences associated with the Rancho Mirage General Plan that has the potential to result in significant, adverse environmental impacts.

The EIR analyzed topics including aesthetics, air quality, biological, cultural, geology and soils, hazards and hazardous materials, hydrology, land use and planning, minerals, noise, population and housing, public services, recreation, transportation, and utilities and service systems. The Hazards and Hazardous Materials section of the EIR evaluates safety hazards in the City including environmental hazards associated with hazardous waste disposal and emergency preparedness. It also provides relevant policies and programs, existing regulations, and mitigation measures to ensure impacts are less than significant.

<u>Emergency Response and Evacuation Plan</u>

Per the General Plan EIR, the two main evacuation routes in the City include I-10 and Highway 111 along with primary and minor arterial streets serving as secondary routes. Since disasters may render certain routes impassible, specific evacuation routes are not identified in the City because they can change depending upon the type of emergency. In addition to emergency services provided by the

City emergency personnel, emergency services are also provided by the Riverside County Fire Department, the County Sheriff's Department, the California Department of Forestry, and the American Red Cross. The Red Cross has an area disaster team coordinator who will respond to any residential fire or other emergency to estimate the damage and the need for further relief.

Wildland Fire Hazards

The fire hazard of an area is typically based on the density and type of vegetation, topography, weather, dwelling unit density, and whether or not there are local mitigation measures in place that help reduce the zone's fire rating such as an extensive network of fire hydrants, fire-related construction, or fuel modification zones. The California Board of Forestry ranks fire hazard of wildland areas of the state using four main criteria: fuels, weather, assets at risk, and level of service. Although there are Very High Fire Hazard Severity Zones mapped in the Rancho Mirage area, the historical record indicates that the wildland fire hazard in the City are relatively low.

### *Rancho Mirage General Plan Update Addendum to the Final EIR*

The Addendum to the Final EIR is an addendum to the City of Rancho Mirage General Plan Final Environmental Impact Report which was certified in 2005. The Addendum analyzes the environmental effects of the 2017 Update to the City General Plan. The Addendum describes the details of the Rancho Mirage General Plan Update and compares its impacts to those identified in the Final EIR. The analysis demonstrates that the General Plan Update would not result in any new significant impacts beyond those identified in the certified 2005 Final EIR.

The Hazards and Hazardous Materials section of the Addendum discusses updates to transport, use, and disposal of hazardous materials, proximity to schools, proximity to airports, emergency response plan, and fire hazard zones within the City and the 2017 General Plan Update. The Addendum concluded that the topics listed above would not result in any new or increased severity impacts compared to the previous General Plan, and impacts would be less than significant.

### *City of Rancho Mirage Municipal Code*

The City of Rancho Mirage Municipal Code Titles 2, *Administration and Personnel*, 14, *Code Compliance and Remedies*, and 17, *Zoning*, establish City personnel responsibilities, standards, and regulations that address the management of hazardous materials and wastes as well as emergency plans in the event of a hazardous disaster for the City of Rancho Mirage. In addition, the Municipal Code identifies the appropriate City personnel who are responsible for carrying out and seeing that these emergency plans are implemented properly.

### *Multi-Hazard Functional Plan*

The City's Multi-Hazard Functional Plan (MHFP) addresses the planned response to extraordinary emergency situations associated with natural or human caused disasters, technological incidents, and

nuclear defense operations. The MHFP is an extension of the State Emergency Plan that is provided through the Governor's Office of Emergency Services (OES). The City of Rancho Mirage ("City") identifies the I-10 and Highway 111 to be the primary evacuation routes for the area.

### *Hazardous Materials Incidence Response Along Transportation Routes*

Two major freeways, Interstate 10 (I-10) and Highway 111, cross the Rancho Mirage area. Highway 111 traverses downtown Rancho Mirage, and I-10 plus the Union Pacific Railroad extend across the City's northern boundary. The EPA does not list any transporters of hazardous materials, posing a potential for spills or leaks from non-stationary sources to occur within the area. Trucks and trains carrying hazardous materials are required to have placards that indicate at a glance the chemicals being carried, and whether or not they are corrosive, flammable or explosive. The California Highway Patrol is in charge of spills that occur in or along freeways, with the California Department of Transportation, and local sheriffs and fire departments responsible for providing additional enforcement and routing assistance.

## 4.8.4 Project Impact Analysis

### Thresholds of Significance

The following standards and criteria for establishing significance of potential impacts related to hazards and hazardous materials were derived from the CEQA Guidelines, Appendix G. Development of the proposed project would have a significant effect to if it is determined that the project would:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
e. For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g. Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires.

Threshold topic "e" is not analyzed further since screening criterion related to local airports concluded that there would be no impacts or less than significant impacts. See 4.8.1, *Introduction,* of this Hazards and Hazardous Materials Section.

## Methodology

Available data to determine the potential for impacts associated with hazards and hazardous materials was assessed based upon the consideration of the project. Whether there is a potential for cumulative impacts associated with hazards and hazardous materials were assessed, based upon the consideration of the project, the project site, and related projects.

## Project Design Features

Proposed building locations and design will be consistent with applicable state and local construction requirements and standards. Project design features regarding hazards and hazardous materials are analyzed further in the subsequent discussions of project impacts.

## Project Impacts

### *a. Create a significant hazard to the public or the environment due to routine transport, use, or disposal of hazardous materials*

The project site is located in the southern portion of the City of Rancho Mirage and currently operates as the Porcupine Creek estate, a private residential estate. Surrounding land uses include the Santa Rosa Mountains to the north, west, and south, the Rancho Mirage Elementary School to the north, and Magnesia Falls Cove neighborhood to the east.

The approximately 191-acre project proposes to develop an exclusive retreat property with up to 50 room "keys", restaurant and dining areas, spa areas, fitness facilities and recreational uses. Existing storm drain channels lie within the property boundary, along the northern boundary, and in the southern portion of the site.

The transportation, use, and disposal of hazardous materials during project construction and operation is discussed subsequently.

#### *Construction*

The various phases of project construction (grading, trenching, construction, architectural coating, street paving, etc.) are expected to involve the temporary management and use of oils, fuels and other potentially flammable substances. The nature and quantities of these products would be limited

to what is necessary to carry out construction of the project. Some of these materials would be transported to the site periodically by vehicle and would be stored in designated controlled areas on a short-term basis. When handled properly by trained individuals and consistent with the manufacturer's instructions and industry standards, the risk involved with handling these materials is considerably reduced. The contractor will be required to identify a controlled staging area within the project limits for storing materials and equipment. The contractor will also be required to implement best management practices (BMPs) to assure that impacts are minimized and that any minor spills are immediately and properly remediated.

Furthermore, to prevent a threat to the environment during construction, the management of potentially hazardous materials and other potential pollutant sources may be regulated, in part, through the implementation of measures in the Storm Water Pollution Prevention Plan (SWPPP), if required by code at the project site. The implementation of a SWPPP requires a list of potential pollutant sources and the identification of construction areas where additional control measures are necessary to prevent pollutants from being released on-site or into the surroundings. Best management practices (BMPs) are necessary for proper material delivery and storage; material use; and spill prevention and control. These temporary measures outline the required physical improvements and procedures to prevent impacts of pollutants and hazardous materials to workers and the environment during construction. For example, all construction materials, including paints, solvents, and petroleum products, must be stored in controlled areas and according to the manufacturer's specifications. In addition, perimeter controls (fencing with wind screen), linear sediment barriers (gravel bags, fiber rolls, or silt fencing), and access restrictions (gates) would help prevent temporary impacts. Nonetheless, all hazardous materials would be stored, handled, and disposed of in accordance with local ordinances and state and federal regulatory requirements to reduce the risk of an accidental spill. Lastly, and upon project completion of construction, all hazardous materials would be removed from the project site. With such standard measures in place, less than significant impacts are anticipated during construction.

Additionally, the project would be operated and constructed under the emergency response plan requirements set forth by the County of Riverside and the City of Ranch Mirage Municipal Code. Therefore, construction related impacts to the transport, use, and disposal of hazardous materials would be reduced to less than significant levels.

### *Operation*

The project proposes the development of a retreat property on approximately 191-acres of currently developed land. The project will include up to 50 studio, single-bedroom, and multi-bedroom "keys", a modified main house, a new restaurant, upgraded spa complex, additional casitas and villas, upgraded and additional and hotel related facilities, and a rerouted 18-hole golf course. Existing storm drain channels lie within the property boundary, along the northern boundary, and in the southern

portion of the site. The project site or its surroundings are not located on a hazardous materials site and is not expected to generate any hazardous waste beyond the proposed uses.

The nature of the proposed retreat uses is not expected to involve, as a primary activity, the routine transport, use, or disposal of hazardous materials in quantities or a manner that would pose a threat to the project and its surroundings or create a significant hazard through a foreseeable accident conditions involving the release of hazardous materials into the environment. The regular operation of the proposed project does not intend to use potentially dangerous amounts of hazardous materials. The handling, application, and storage of cleaning agents, building maintenance products, paints, solvents and other related substances is expected to occur within the project in order to carry out the necessary operations in each facility or use. However, these materials would not be present in sufficient quantities to pose a significant hazard to public health and safety, or the environment.

The retreat land use will consist of resort related amenities including restaurants, spa facilities, lounge and activity rooms, outdoor activities; tennis, yoga, walking and hiking trails. These facilities would likely use cleaning products that are labeled as hazardous, however quantities used are anticipated to be insufficient to pose any hazard. Additionally, project landscaping, including golf course maintenance, typically uses products that may be hazardous in large quantities. However, these products will be used on the project site in small quantities and will not present a significant hazard to the public or environment.

Onsite storage and maintenance areas may include hazardous materials associated with landscape maintenance (fertilizers, pesticides, herbicides), as well as the maintenance of golf carts and other equipment used onsite. Therefore, the applicant shall submit a Hazardous Materials Business Plan (HMBP) to the Riverside County Fire Department that identifies the hazardous materials to be used and stored on site, the location of the storage area, an emergency contingency plan showing how spills would be cleaned up, and any other information required in an HMBP. Or the applicant may provide evidence that the activities that will occur within this facility would not rise to the level that an HMBP is required. This is set forth in **Mitigation Measure HAZ-1** in Section 4.8.5, *Mitigation Measures*.

According to Riverside County Municipal Code Chapter 8.64, *Disclosure of Hazardous Materials and Formulation of Business Emergency Plans*, the County established a system for permitting businesses that handle hazardous materials in order to enforce minimum standards respecting such materials. Under the administration of the County of Riverside Department of Environmental Health (DEH), and in compliance with the Hazardous Materials Release Response Plans and Inventory Law, Chapter 6.95 of the California Health and Safety Code (HSC), any business handling and/or storing a hazardous material shall obtain a permit from the DEH and electronically submit a business plan in the statewide Informational Management System. Should any component of the proposed project, such as maintenance areas, require the storage or handling of hazardous materials, as defined in Chapter 8.64 of the Riverside County Municipal Code, it shall be required to follow the procedures established

in the Municipal Code and Chapter 6.95 of the HSC. Maintenance areas may contain storage of petroleum products, landscaping fertilizers, and other products required for onsite maintenance of the property. Compliance of these procedures will ensure that impacts due to the use, transport and disposal of hazardous materials would be less than significant during project operation.

### *b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment*

#### *Construction*

The project site is currently developed and operates as a private estate. Construction of the proposed retreat property will include activities such as vegetation removal, grading, and building construction. Construction and vegetation debris would be disposed of in accordance with state and local regulations and guidelines. Thus, construction of the site would not result in a significant hazard to the public or environment.

During construction of all components of the project (grading, trenching, construction, architectural coatings, street paving, etc., quantities of hazardous materials, (e.g., hydrocarbon fuels, hydraulic fluids, coolants) would be used in the operation and maintenance of construction vehicles and equipment that may be stored on site. In addition, the project's implementation of a Storm Water Pollution Prevention Plan (SWPPP), when required by code, would enforce best management practices (BMPs) specific towards construction waste management. The SWPPP would be exercised by the project developer, construction superintendent and all construction staff during project construction (see **Section 4.9, *Hydrology and Water Quality***). Nonetheless, all hazardous materials would be stored, handled, and disposed of in accordance with local ordinances and state and federal regulatory requirements to reduce the risk of an accidental spill. Lastly, upon project completion of construction, all hazardous materials would be removed from the project site. Therefore, with implementation of a SWPPP (when required by code) during all phases of construction, impacts are expected to be less than significant.

#### *Operation*

As stated in discussion a., the nature of the proposed retreat uses are not expected to use hazardous materials in quantities or a manner that would pose a threat to the project and its surroundings or create a significant hazard through a foreseeable accident conditions involving the release of hazardous materials into the environment. The retreat land use will consist of resort related amenities including restaurants, spa facilities, lounge and activity rooms, and outdoor activities including golf, tennis, yoga, walking and hiking trails. These facilities would likely use cleaning products that are labeled as hazardous. However, these cleaning and maintenance products would be used in small quantities that are not sufficient to cause significant damage to the environment. Additionally, project

landscaping and golf course maintenance, typically use products that may be hazardous in large quantities. However, these products will be used on the project site in small quantities and will not present a significant hazard to the public or environment.

The handling, application, and storage of cleaning agents, building maintenance products, paints, solvents, and other related substances are expected to occur within the project site to carry out the necessary operations in each proposed facility or use. By following the appropriate federal, state, and local regulatory standards, less than significant impacts are expected pertaining to significant hazards to the public or the environment through accident conditions involving the release of hazardous materials into the environment.

### *c. Emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school*

The nearest school to the project site is the Rancho Mirage Elementary School, located at 42985 Indian Trail in Rancho Mirage. The elementary school abuts the northern project boundary. Major construction would occur at least 250 feet from the elementary school.

As previously stated, the Porcupine Creek property is currently used as a private estate with a golf course and recreational amenities. The property was entitled in 1997 and thereafter constructed as a private estate with a multitude of amenities. Since 2011, the property has been extensively remodeled and upgraded to its existing state. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, a fitness center, a gate house, and new villas with an additional 15,000 square feet planned for construction through 2020 under existing entitlements. In addition, much of the landscape and irrigation has been remodeled. Planned construction in 2020 will include the development of villas 7 and 8.

The Porcupine Creek Retreat project proposes an exclusive retreat with up to 50 studio, single-bedroom, and multi-bedroom "keys", as well as a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, upgraded and additional hotel related facilities, and a rerouted 18-hole golf course. The proposed development will occur within the existing boundaries of the Porcupine Creek Retreat Specific Plan property (areas that have been subject to development in the past.)

## Construction

Construction access to the project site occurs at the northern-most entry point at Mirage Road. This access point is gated and manned. Construction parking is located along the paved asphalt road, upon entry of the Mirage Road gate. The construction employees are then shuttled, via golf cart, to the construction location. Construction materials are currently stored onsite in an area north of the

existing main house. As stated in the previous discussions, implementation of the Storm Water Pollution Prevention Plan (SWPPP) during project construction, and if required by code, will ensure that hazardous materials and waste are handled per manufacturer's instruction so that it is not released into the environment in a manner that results in impacts to the surrounding uses as well as the subject property.

### Operation

The nature of the proposed retreat is not expected to emit hazardous emissions or handle hazardous materials, substances, or waste in large quantities. The handling, application, and storage of cleaning agents, building maintenance products, paints, solvents and other related substances is expected to occur within the project in order to carry out the necessary operations in use.

Project construction and operation is not anticipated to emit hazardous emissions or handle hazardous materials in quantities that would affect the surrounding uses, including Rancho Mirage Elementary School. Impacts will not be significant.

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

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state, local agencies and developers to comply with CEQA requirements to provide information about the location of hazardous materials release sites. Government Code section 65962.5 requires that a list of these sites be maintained and updated least annually. The State's Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List.

The project proposes to develop 50 studio, single-bedroom and multi-bedroom "keys", as well as a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, and hotel related facilities, and a rerouted 18-hole golf course.

The resources consulted included GeoTracker, EnviroStor and the EPA Enforcement and Compliance History Online (ECHO).

GeoTracker is a database maintained by the State of California Water Resources Control Board that provides online access to environmental data. It serves as the management system for tracking regulatory data on sites that can potentially impact groundwater, particularly those requiring groundwater cleanup and permitted facilities, such as operating underground storage tanks and land disposal sites.

EnviroStor is a database maintained by the State of California Department of Toxic Substances Control (DTSC). The EnviroStor database identifies sites with known contamination or sites for which there may be reasons to investigate further. It includes the identification of formerly contaminated

properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Moreover, the ECHO database focuses on inspection, violation, and enforcement data for the Clean Air Act (CAA), Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) and also includes Safe Drinking Water Act (SDWA) and Toxics Release Inventory (TRI) data.

In March 2020, a search was performed on all three database platforms. The project property did not appear on the searched databases. The closest registered site to the project property is Texaco Station Rancho Mirage, located at 71689 Highway 111, approximately 0.45 miles northeast of the project property. This site was listed in GeoTracker as a LUST Cleanup Site, however the cleanup status of this registered facility is identified as "completed – case closed" as of March 20, 1996.

The ECHO database did not register the project property as a listed facility. The closest facility to the project site was registered as World Oil Marketing Company. This site is located at the same location as the Texaco site listed by GeoTracker, at 71689 Highway 111, approximately 0.45 miles northeast of the project. It is likely that the site changed management, which explains the change in registered name.

The search results in the EnviroStor database did not identify any records of a site within a mile of the project property, unlike the GeoTracker and ECHO databases. The EnviroStor database did not identify any Leaking Underground Storage Tank (LUST) Cleanup Sites, Land Disposal Sites, Military Sites, DTSC Hazardous Waste Permits, DTSC Cleanup Sites, or Permitted Underground Storage Tanks on or around the project property.

After the search of the three databases, it can be concluded that the sites listed are not anticipated to affect the project site due to their distance to the site and their status as "Completed-Case Closed" or no violations. Additionally, development and operation of the proposed project will not result in impacts to the registered facilities, for the same reasons. Overall, no impacts are anticipated.

## *f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan*

### *Construction*

Construction activities on the Porcupine Creek site has occurred since 2011, adding various casitas, villas, and recreational uses onsite. During the year 2020, the development of approximately 15,000 square feet of additional building footprint will be developed on the property. Currently, construction access to the site occurs at the northern corner of the site, at Mirage Road. This entry point has been utilized for construction access since 2011, when additional upgrades to the site were made. This

point of access will continue to be the property's construction entrance during the development of the Porcupine Creek Retreat Specific Plan project.

According to the City of Rancho Mirage General Plan, the two main evacuation routes in the City and region includes the Interstate 10 freeway (I-10) and Highway 111. The primary and minor arterial streets serve as secondary routes. Depending on the hazard and location, specific evacuation routes may need to be designated during an emergency by the City. The closest evacuation route to the project site is Highway 111, approximately 0.50 miles east of the site. The closest minor arterial to the project site is Bob Hope Drive, which also lies approximately 0.50 miles east of the project property. Construction of the project would not physically interfere with access to these routes or interfere with the operations of the City during an emergency.

### *Operation*

As stated previously, the closest evacuation routes to the project site, as established in the Rancho Mirage General Plan, is Highway 111 and Bob Hope Drive, both approximately 0.50 miles east of the site. Since disasters may render certain routes impassible, specific evacuation routes are not identified by the City because they can change depending upon the type of emergency and location.

Currently, an emergency access to the project site is located at the southeastern corner of the site, at Magnesia Falls Drive. In addition to the emergency access point at the southeastern corner of the property, access to the property occurs at the northeastern corner of the site, at Mirage Road, and at the eastern side of the site, at Dunes View Road. The existing onsite network of private driveways are constructed in accordance with City engineering and fire access standards in order to serve the various buildings onsite. Access to the additional proposed buildings will also comply with City engineering and fire access standards to allow emergency vehicles and personnel access throughout the property.

With the foregoing, operation of the project is not anticipated to significantly impact the City's adopted emergency response and evacuation plans.

## *g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires*

According to the Rancho Mirage General Plan EIR, the undeveloped areas in Rancho Mirage that borders the southern and western sides of the City are characterized by steep topographic gradients that are generally conducive to spreading wildfires. Furthermore, the area's hot, dry summer and autumn weather is ideal to generate the dry vegetation that fuels most wildfires. The only recorded historical wildfire near the planning area is the Dry Falls fire that occurred in August 1980, southeast of the City. The reason that most of the undeveloped areas of Rancho Mirage have not been impacted by wildland fire is that most of the rugged terrain is steep, rocky and dry that few plants thrive in the

area. As a result, the amount of fuel available for wildland fire is very limited, and the distance between stands of vegetation is too great for fires to spread easily. In the developed areas in the City, the landscape vegetation is carefully maintained and watered regularly, creating conditions that limit the possibility for vegetation fires to ignite and spread. Therefore, impacts from wildfires, including risk of loss, injury or death involving wildland fires, are anticipated to be less than significant.

Further analysis of wildfire impacts at the project property is provided in the **Section 4.16, *Wildfires***, in this Draft EIR.

## 4.8.5 Cumulative Impacts

Implementation of the proposed Porcupine Creek Retreat Specific Plan project would not have the potential to make a cumulatively considerable impact, in combination with impacts from past, present, or reasonably foreseeable projects and would be considered less than significant.

There are no cumulative impacts associated with the proposed project related to the use, storage, disposal or handling of hazardous materials or substances, since the proposed nature of the project will not use hazardous materials in large quantities. The retreat and recreational uses would be largely limited to household cleaning products or landscape care products. The transport, use, storage, and disposal of hazardous materials or substances at the golf course generally limited to the maintenance of the golf course and the golf carts would be subject to the development and implementation of a HMBP. Finally, emergency access through the project site would continue to exist at Magnesia Falls Drive, at the southeast corner of the property.

The project would be required to comply with all applicable code and ordinance requirements of the Riverside County Fire Department for access, water mains, fire flows, fire sprinkler systems, and fire hydrants. Therefore, cumulative impacts would be less than significant.

## 4.8.6 Mitigation Measure

**HAZ-1** Prior to occupancy of the golf course storage and maintenance facilities, the applicant shall provide to the Riverside County Fire Department, a Hazardous Materials Business Plan (HMBP) for review and approval. The information from the HMBP shall be made available to first responders in the County for emergency response activities. All handlers are required to disclose their inventory of hazardous materials in the form of a HMBP. The HMBP shall be kept up to date in a location on-site and be available for review by the Fire Department, as needed.

## 4.8.7 Level of Significance After Mitigation

Implementation of existing regulations and standards identified above, along with the project's design features and adherence to **Mitigation Measure HAZ-1**, the project's potential impacts associated with hazards and hazardous materials would be reduced to a less than significant level.

## 4.8.8 Resources

1. GeoTracker, State Water Resources Control Board, https://geotracker.waterboards.ca.gov/ accessed February 2020.
2. EnviroStor, Department of Toxic Substance Control, https://www.envirostor.dtsc.ca.gov/public/, accessed February 2020.
3. Enforcement and Compliance History, Environmental Protection Agency, https://echo.epa.gov/facilities/facility-search/results, accessed February 2020.

# 4.9 Hydrology and Water Quality

## 4.9.1 Introduction

The purpose of this section is to discuss the hydrology and surface water quality context in which the proposed project will be implemented. The subject principles, descriptions and supporting analysis are based on multiple regulatory and reference documents cited throughout this section, as these provide relevant background information. Reference documents include sections the Federal *Clean Water Act* (CWA); Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06065C2206G, effective August 28, 2008; *Water Quality Control Plan for the Colorado River Basin Region* (Basin Plan), January 2019; and *Whitewater River Region Water Quality Management Plan for Urban Runoff* and the associated *Whitewater River Watershed MS4 Permit*, effective June 20, 2013; *Indio Subbasin Sustainable Groundwater Management Act (SGMA) Plan*; *2018 Coachella Valley Integrated Regional Water Management and Stormwater Resources Plan, December 2018;* and *City of Rancho Mirage General Plan 2017*, Flooding and Hydrology Hazards Section of the Safety Element (Chapter 8), 2017. At the localized project level, the analysis primarily relies on the site hydrology and surface drainage conditions accounted for in the *Porcupine Creek Estate As-Built Hydrology Report* ("As-Built Hydrology Report"), approved by the City of Rancho Mirage Public Works Department on October 9, 2014.

Primary considerations for this hydrology and surface water quality assessment include the prevailing rainfall characteristics for the project region and the physical setting at the watershed and local level, as these determine the existing and proposed surface drainage conditions in which the proposed project will be undertaken. Moreover, the content and analysis in this section relies considerably on the hydrology, stormwater, and surface water quality regulatory framework, which regulates general and finite aspects of land development activities during the design, construction, and operational phases. The approved hydrology report referenced herein is provided in the Appendices of this Draft EIR (**Appendix F.1 and F.2,** *Porcupine Creek As-Built Hydrology Report*). Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.9.2 Existing Conditions

### Relevant Principles in Hydrology and Stormwater Management

Hydrology refers to the occurrence, distribution, and movement of surface water, including water found in rivers and stormwater drainage systems. Stormwater refers to the surface runoff and drainage resulting from rain events. Stormwater runoff and surface drainage patterns are determined by the topography and associated gradients of the land. Surface water quality refers to selected physical, chemical, or biological characteristics found in stormwater in relation to an established standard.

Groundwater is the water found underground in the voids in soil, sand, and rock. It is stored in and moves slowly through aquifers. Groundwater supplies are replenished, or recharged, by precipitation that seeps into the land's surface.

This section analyzes how the principles of urban runoff management are applied to the existing Porcupine Creek hydrology and stormwater infrastructure, as well as the additional improvements needed to accommodate the proposed project. The traditional process of urbanization and land development generally results in the conversion of a natural ground surface environment (pre-development condition) into a setting with a higher impervious cover, occurring through the introduction of streets, buildings, and hardscape (post-development condition). The development process typically results in reductions in vegetative or pervious cover in exchange for impervious cover, resulting in a lower capacity to intercept, retain, and infiltrate stormwater runoff. Therefore, land development that is not regulated by hydrology and stormwater controls can result in a post-development condition in which 1) total stormwater runoff volume increases, 2) the runoff conveyance occurs more rapidly, and 3) the peak discharge is greater. The increase in runoff volume results from the decrease in infiltration and depression storage characteristics found in undeveloped land (pre-development). The shortened runoff conveyance time results from the greater flow velocities along impervious surfaces and drainage systems. The increase in peak discharge is the effect of larger runoff volume occurring over a shorter time compared to the pre-development condition.

The effects of unregulated land development typically have the potential to result in degradation to surface drainage, soil erosion and siltation, and water quality impairments. However, as this section explains, the robust mandates established at the federal, state, regional, and local level are designed to prevent land development activities from incurring or causing such hydrologic or water quality impacts. Stormwater management and adherence to surface water quality standards are achieved through mandated measures rather than voluntary actions, such that physical disturbance, vegetation clearing, earth movement, grading, and construction activities are not permitted without demonstrating compliance with the local, regional, and state permitting authorities.

## Regional Hydrologic Conditions

The project is located in the Whitewater River Watershed, which is an arid desert region encompassing approximately 1,645 square miles. Within this watershed, a sub-area of approximately 367 square miles (22 percent) encompassing most of the existing development in the region, is regulated under the established *Whitewater River Region Municipal Separate Storm Sewer System Permit* (MS4 Permit). Riverside County Flood Control and Water Conservation District (RCFC&WCD), Coachella Valley Water District (CVWD) and the incorporated Coachella Valley cities, including Rancho Mirage, have joint permittee responsibility for coordinating the regional MS4 Permit compliance programs and other activities aimed at reducing potential pollutants in urban runoff from land development construction, municipal, commercial, and industrial areas to the maximum extent possible.

Based on the Whitewater River Region MS4 Permit, precipitation in the Whitewater River Region averages 3.6 inches per year, which is 65 to 75% less annual precipitation than western portions of Riverside County and the coastal counties in Southern California. The Whitewater River Watershed has no defined rainy (wet) season, considering that convective rainfall events (summer thunderstorms) make up a large portion of Whitewater River Region annual rainfall, in contrast to the general winter precipitation that dominates rainfall events in western Riverside County and the coastal plains. When storms occur, they tend to be discrete convective cells, and feature short but intense rainfall, typical of monsoonal thunderstorms; individual storm events typically are localized and rarely affect the entire drainage network.

The Whitewater River Region is drained primarily by the Whitewater River that carries flows to the Coachella Valley Stormwater Channel (CVSC), which outlets to the Salton Sea. It is worth noting that the Salton Sea body of water is not deemed part of the Whitewater River Watershed regulation, as it is separately managed and also receives inflow from Alamo River and New River in a separate watershed in Imperial County. Therefore, the Whitewater River Region includes the Coachella Valley surface drainage up to, but not including, the Salton Sea.

In relation to the project site, Whitewater River is located approximately 0.5 miles to the north at its closest point. Surface drainage within the local watershed, including Whitewater River, generally consist of ephemeral washes. Due to soil type and lack of interflow contributions, time and volume of flow in receiving waters after storm events are minimal. According to the referenced MS4 Permit, Whitewater River flow in the Coachella Valley floor is so infrequent that several sections of the channel have been integrated into golf courses as a regular practice. Drainage integration into golf course settings is a common practice in the Coachella Valley, as it allows for proper stormwater controls under conditions that are actively maintained by public and private operators. The segment of Whitewater River in the City of Rancho Mirage is engineered, stabilized, and maintained for its flood control function.

In the subsequent hydrology discussions, references to stormwater runoff, volumes, drainage, retention, and related dynamics, will pertain directly to the prevailing temporary ephemeral conditions occurring after precipitation events, in contrast to perennial drainage, which occurs more permanently throughout the year, but is not applicable to the regional or local hydrologic setting.

During these discussions, there will also be references to a controlling 100-year storm event, which is a storm event and resulting flood having a 1-percent chance of occurring in any given year. The rainfall amount and resulting runoff characteristics from this type of event are used to determine storm drain system capacities, including inlets, pipes, channels, and retention facilities.

## Local Hydrologic Conditions and Existing Infrastructure

The local hydrologic conditions include the existing on-site developed property in relation to the neighboring hillside terrain. The northerly, westerly, and southerly edges of the private estate grounds

are met by hillside terrain corresponding to the Santa Rosa Mountains, with Magnesia Spring Canyon being the primary ephemeral drainage contributor to the fan that descends northeasterly along a bajada to the Coachella Valley floor area. In its current condition, the entire fan is considered developed and absent of any native condition.

In this local context, the off-site hydrology conditions relevant to the project setting are comprised of two separate hillside tributary areas, the condition of which has been the subject of prior regional flood protection design and construction by the U. S. Army Corps of Engineers (USACE) and Coachella Valley Water District (CVWD). The technical analysis and preliminary engineering work were presented in the *West Magnesia Canyon Channel, City of Rancho Mirage, Detailed Project Report*, by USACE, dated December 1983. As described therein, flood control infrastructure consists of one debris basin and two channels. The Magnesia Springs Debris Basin occupies approximately 16 acres at top of the fan (west of the project) to accept tributary ephemeral drainage and associated debris production from a hillside area that includes Magnesia Spring Canyon. The debris basin bed consists of homogenous soil, protected on its sides by a broad-crested concrete-lined embankment. The debris basin is directly connected to the West Magnesia Canyon Channel by concrete spillways. The Magnesia Canyon Channel is a reinforced-concrete channel, approximately 7,000 feet long, extending from the debris basin to the Whitewater River. The engineered facility follows a northeasterly direction along the toe of the mountain to eventually confluence with Whitewater River approximately 0.5 miles north of the project. Based on the As-Built Hydrology Report, the West Magnesia Canyon Channel reach bordering the project is a 20-foot wide concrete-lined rectangular channel varying in depth from 8 feet at the northerly section to 12 feet at the southerly section. The channel has an average slope of 4 percent along this section and can carry the Standard Project Flood (SPF) of 6,900 cubic feet per second (CFS) at a normal depth of 6.8 feet (analyzed using Manning's equation for open channel flow). The SPF refers to the flood volume or flow resulting from the most sever combination of meteorological and hydrological conditions, to which a flood control facility was designed. Manning's equation is used in the field of hydrology to estimate velocity for channel flow. This established flood control infrastructure is designed to adequately protect the project and nearby developed areas from the corresponding tributary area.

South of the project, the hillside terrain forms a tributary area that descends to a separate receiving flood control system, formally identified as East Magnesia Canyon Channel. Within the Porcupine Creek property, stormwater management is integrated into the existing golf course design and landscaped topography, which is constructed and accounted for in the City-approved As-Built Hydrology Report. Along part of the southern portion of the golf course, a landscaped ridge feature functions as the northern training dike for the containment of tributary runoff. This golf course area also includes constructed retention basins (depressed areas) to establish on- and off-site stormwater runoff controls before conveyance to the off-site East Magnesia Canyon Channel. The flood control portion of the golf course is absent of any habitable buildings and no additional habitable buildings are proposed therein. The receiving East Magnesia Canyon Channel continues in an easterly direction at the base of the

mountains before conferencing with other channelized stormwater facilities that eventually drain into Whitewater River.

### Project Site Conditions and On-Site Infrastructure

The existing project site hydrology and drainage conditions are described in the *Porcupine Creek Estate As-Built Hydrology Report* ("As-Built Hydrology Report"), approved by the City of Rancho Mirage Public Works Department on October 9, 2014. This hydrology study was prepared in coordination with the golf course improvements that took place on-site in 2013 and 2014. The purpose of this study was to ascertain how the construction, drainage, and retention facility improvements made to the Porcupine Creek property in various phases would collectively handle the tributary stormwater drainage conditions resulting from the controlling 100-year storm event to comply with Section 13.05.010 of the Rancho Mirage Municipal Code (required on-site retention) and pertinent conditions of approval. By reconciling all relevant and prior hydrology documentation with the 2014 topographic data and engineering analysis, the As-Built Hydrology Report becomes the governing document for the property's stormwater management and the basis of evaluation for the current proposed project.

The As-Built Hydrology Report divides the Porcupine Creek's on-site hydrologic area of 165.39 acres into nine (9) sub-drainage areas, which are physically delineated by the topographic relief and construction improvements that constitute the on-site storm drain infrastructure. It is worth noting that the 165.39-acre hydrologic study area for the project refers to the developed setting, as a subset area of the 191-acre Specific Plan boundary. Land outside of the hydrologic area, but within the Specific Plan boundary, consists of hillside terrain that does not interact with the on-site surface drainage condition. Within each sub-drainage area, a calculation of the impervious (buildings, hardscape, pavement) and pervious (golf course and landscaping) cover was made to determine the amount of runoff to be produced therein, resulting from the worst-case (controlling) 100-year storm event scenario. The amount of stormwater runoff volume was then compared to the capacity of the respective basin (depressed area). The As-Built Hydrology Report concluded that in the on-site hydrologic study area, the combined stormwater runoff volume generated by the controlling storm event was approximately 599,986 cubic feet and the combined retention basin storage capacity provided by the site was 1,230,299 cubic feet. The retention basin capacity was therefore determined to be sufficient to handle the on-site runoff conditions, while maintaining a surplus capacity of 630,313 cubic feet. In doing so, the hydrology report demonstrated to the City that the Porcupine Creek property conditions would adequately intercept and retain runoff for the existing conditions, while maintaining additional stormwater retention and management capacity, from which the proposed project will benefit.

## 4.9.3 Regulatory Setting

As previously introduced, hydrology and stormwater management controls for land development activities are regulated under a robust framework of mandates at the federal, state, regional, and local

level. The applicable requirements are aimed at preventing land development from causing impacts to the chemical, physical, and biological integrity of receiving streams, rivers, and water bodies. These regulations apply at different stages of development, including planning, design, construction and post-construction, such that physical land disturbance, vegetation clearing, earth movement, grading, construction activities, and facility operations would not be permitted to occur without demonstrating compliance with the local, regional, and state permitting authorities.

## Federal

### *Federal Clean Water Act*

The Clean Water Act (CWA) of 1972 was enacted to restore and maintain the chemical, physical, and biological integrity of the nation's waters by regulating the discharge of pollutants to waters of the U.S. from point sources. As part of the National Pollutant Discharge Elimination System (NPDES) program, subsequent amendments to the CWA established a framework for regulating non-point source discharges from urban land runoff and other diffuse sources that were also found to contribute to runoff pollution. Under CWA, the Environmental Protection Agency (EPA) authorized the NPDES permit program to various state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the program. California is a delegated NPDES state and has authority to administer the NPDES program within its limits as subsequently described. The pertinent sections of the CWA regulatory structure are summarized below:

Section 102 requires the planning agency of each state to prepare a basin plan to set forth regulatory requirements for protection of surface water quality, including designated beneficial uses for surface waterbodies, and specified water quality objectives to protect those uses.

Section 303(d) requires each state to provide a list of impaired surface waters that do not meet or are expected not to meet state water quality standards as defined by that section.

Section 402 requires that all point-source discharges, including, but not limited to, construction-related runoff discharges to surface waters and some post-development dischargers, be regulated through the National Pollutant Discharge Elimination System (NPDES) program. Project sponsors must obtain an NPDES permit from the State Water Resources Control Board (SWRCB).

### *National Flood Insurance Program*

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) serve as the basis for identifying potential hazards and determining the need for and availability of federal flood insurance. As mandated by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized federal flood insurance to residents of communities where future floodplain development is regulated. FEMA has developed FIRMS to determine the need for and availability of federal flood insurance. FIRM

maps rely on a variety of flood risk information based on historic, meteorological, hydrologic and hydraulic data, as well as existing development, open space and topographic conditions within an area. FEMA mapping also incorporates the results of engineering studies to delineate Special Flood Hazard Areas (SFHAs), which are considered at higher risk of inundation and flood-related hazards.

## State and Local

### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act (California Water Code section 13000 et seq.) is the principal law governing water quality regulation for surface waters in California, thus effectuating the delegated provisions of the federal CWA and its NPDES program. It has set forth a comprehensive program to protect water quality and the beneficial uses applicable to surface waters, wetlands, and ground water and to point and nonpoint sources of pollution. The Porter-Cologne Act establishes that, as a matter of policy, all the waters of the State shall be protected; all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and that the state must be prepared to exercise its full power and jurisdiction to protect the quality of water in the state from degradation.

To regulate and protect water quality pursuant to NPDES and to exercise rulemaking and regulatory activities, the Porter-Cologne Act established the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards (RWQCBs). In this context, the project site and Coachella Valley are located within Region 7, Colorado River Regional Water Quality Control Board.

Another mechanism of the Porter-Cologne Act is the requirement to adopt water quality control plans containing the guiding policies of water pollution management in the state. Under this framework, the Colorado River Basin Water Quality Control Plan (Basin Plan) serves as the applicable document prepared, adopted, and maintained to identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The Basin Plan is the guiding document that outlines the Colorado River Basin Water Board's plan for preserving and enhancing water quality in the region for the protection of beneficial uses for present and future generations. The Basin Plan contains the region's beneficial uses for groundwaters and surface waters, water quality objectives for protection of beneficial uses, and implementation programs to achieve water quality objectives.

### *NPDES Stormwater General Permit for Construction Activities*

Under the federal CWA, discharges of stormwater from construction sites must comply with the conditions of a National Pollutant Discharge Elimination System (NPDES) permit. The SWRCB has adopted the Construction General Permit that applies to projects resulting in 1 or more acres of soil disturbance. These requirements occur under the state's most current Construction General Permit (CGP), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ. Compliance

with the CGP involves the development and implementation of a project-specific Storm Water Pollution Prevention Plan (SWPPP), designed to prevent potential adverse impacts to surface water quality, including erosion and siltation, during the period of construction. As applicable, the SWPPP is required to provide limits of temporary disturbance and will indicate the specific locations where storm water Best Management Practices (BMPs) will be implemented. Storm water BMPs refer to a schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent, eliminate, or reduce the pollution of receiving waters. BMP examples also include treatment requirements, operating procedures, and practices to prevent plant site runoff spillage or leaks. Consistent with Section XIV of the CGP, the required SWPPP must also specify the necessary recordkeeping, relevant good site housekeeping requirements, proper waste management, proper handling and storage within the allowable construction limits.

### *Whitewater River Watershed Municipal Separate Storm Sewer System*

In 1987, Congress amended the Federal Clean Water Act (CWA) to require public agencies which serve urbanized areas with a population greater than 100,000 to obtain permits to discharge urban stormwater runoff from municipally owned drainage facilities including streets, highways, storm drains and flood control channels. In November 1990, the United States Environmental Protection Agency (USEPA) promulgated enforceable regulations establishing Municipal Separate Storm Sewer System (MS4) Permit requirements under its National Pollutant Discharge Elimination System (NPDES) Program. In California, USEPA has delegated its NPDES permitting authority to the California State Water Resources Control Board (CSWRCB), which issues and enforces NPDES MS4 Permits through its nine designated regions.

As previously introduced, the Whitewater River Region MS4 Permit applies to an area of approximately 367 square miles, which generally corresponds to the urbanized portions of the watershed and Coachella Valley. The MS4 Permit compliance programs are administered by Riverside County Flood Control and Water Conservation District, (RCFC&WCD,) CVWD, and the incorporated Coachella Valley cities, including Rancho Mirage. The objective of the MS4 regulations is in part to reduce potential pollutants in urban runoff from land development construction, municipal, commercial, and industrial areas to the maximum extent possible.

### *Indio Subbasin Sustainable Groundwater Management Act*

The Coachella Valley Groundwater Basin is the primary groundwater source for the project region, with Coachella Valley Water District (CVWD) being the domestic water purveyor serving the project site. Based on a 1964 estimate by DWR, the Coachella Valley Groundwater Basin has an approximate storage capacity of 39.2 million acre-feet (AF) of water within the upper 1,000 feet and is divided into four subbbasins: Indio, Mission Creek, Desert Hot Springs, and San Gorgonio. The project site is specifically underlain by the Indio Subbasin, which is also known as the Whitewater River Subbasin. In 1964, DWR

estimated that the Indio Subbasin contained approximately 29.8 million acre-feet (AF) of water in the first 1,000 feet below the ground surface, or approximately 76 percent of the total groundwater in the Coachella Valley Groundwater Basin. CVWD works with other local water agencies and Coachella Valley stakeholders to implement water conservation, water reuse, and groundwater recharge strategies to ensure water availability and system capacity to meet the growing needs of the Coachella Valley.

In 2002, recognizing that continued overdraft was a threat to the economy and quality of life in the Coachella Valley, CVWD developed the *2002 Coachella Valley Groundwater Management Plan* in collaboration with other local stakeholders. The 2002 plan focused on reducing overdraft, preventing groundwater level decline, protecting groundwater quality, and preventing land subsidence. In 2010, the *2010 Coachella Valley Groundwater Management Plan Update* was prepared to document the accomplishments in reducing overdraft and address changed conditions since 2002.

In 2014, the California Legislature signed a three-bill legislative package into law, collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA allows local agencies to manage groundwater resources in a sustainable manner, with management efforts tailored to the resources and needs of their specific communities. Groundwater management is described as the planned and coordinated monitoring, operation, and administration of a groundwater basin sustainability. SGMA requires that a Groundwater Sustainability Plan (GSP) or Alternative Plan to a GSP (Alternative Plan) be adopted for basins and subbasins designated by the California Department of Water Resources (DWR) as medium- and high-priority basins. Basin prioritization is based on a variety of factors such as population, number of wells, and other information determined to be relevant by DWR. SGMA requires that a Groundwater Sustainability Agency (GSA) be established to manage the basin and develop the plan. The GSP or Alternative Plan must explain how the groundwater basin will be kept in balance, to achieve long term sustainability. DWR will evaluate each GSP or Alternative Plan in how well it will achieve basin sustainability. The Indio Subbasin was designated as a medium-priority subbasin by DWR.

Coachella Valley Water District (CVWD), Coachella Water Authority (CWA), Desert Water Agency (DWA), and Indio Water Authority (IWA) collectively represent the Indio Subbasin GSAs. In January 2017, the GSAs submitted to DWR the 2010 Coachella Valley Water Management Plan (2010 CVWMP), accompanied by an Indio Subbasin Bridge Document, as a SGMA-compliant Alternative Plan. On July 17, 2019, DWR approved the Alternative Plan with a requirement to submit an Alternative Plan Update by January 1, 2022 and every five years thereafter. Based on the Indio Subbasin SGMA documentation, the combined strategies have resulted in significant groundwater storage increases across the subbasin, thus allowing the region to comply with the framework for sustainable management.

### *2018 Coachella Valley Integrated Regional Water Management and Stormwater Resources Plan*

This 2018 Coachella Valley Integrated Regional Water Management (IRWM)/Stormwater Resource (SWR) Plan serves as a combined plan which addresses the requirements of the California Department

of Water Resources (DWR) Proposition 1 2016 IRWM Grant Program Guidelines and the State Water Resources Control Board (SWRCB) 2015 Stormwater Resource Plan (SWRP) Guidelines. The plan is managed by five water purveyors and one wastewater agency of the Coachella Valley.

The IRWM program is a local water resources management approach directed by California Department of Water Resources (DWR), aimed at securing long-term water supply reliability within California by first recognizing the inter-connectivity of water supplies, and then encouraging the development and implementation of projects that yield combined benefits for water supplies, water quality, and natural resources. The IRWM Plan and Stormwater Resource Plan (SWRP) has been combined into one document because of the regional approach, overlap of stakeholder interests and existing stakeholder network, and similar grants and project scoring processes for the two plans. SWRP development focuses on stormwater and dry weather runoff capture. Following the passage of Senate Bill (SB) 985, any stormwater or dry weather runoff capture project receiving funding from any bond approved after January 1, 2014 must be included in a SWRP. The intent of SB 985 is to encourage the use of stormwater and dry weather runoff as a resource to improve water quality, reduce localized flooding, and increase water supplies for beneficial uses and the environment. The SWRCB provides guidance for the development of SWRP's through the SWRCB 2015 SWRP Guidelines and manages the associated Stormwater Grant Program (SWGP).

### *Coachella Valley Water District (CVWD) Ordinance No. 1302*

Purpose of this ordinance is to establish effective water efficient landscape requirements for newly installed and rehabilitated landscapes, applicable valley-wide. This ordinance is also intended to implement the requirements of the State of California Water Conservation in Landscaping Act. Through Chapter 17.24 of the Rancho Mirage Municipal Code, summarized below, the City has established measures that are consistent with Ordinance No. 1302.

### *City of Rancho Mirage Municipal Code*

#### *Chapter 7.03 - Stormwater Management and Discharge Control*

The intent of this chapter is to protect and enhance the water quality of City watercourses, water bodies, groundwater and wetlands in a manner pursuant to and consistent with the federal Clean Water Act. This intent is achieved through the regulation of non-stormwater discharges to the municipal separate storm drain; control of the discharge to municipal separate storm drains from spills, dumping or disposal of materials other than stormwater; and reduction pollutants in stormwater discharges to the maximum extent practicable.

Section 13.05.010

In addition to the applicable CWA, NDPES, and MS4 provisions, Rancho Mirage Municipal Code Title 13, Section 13.05.010, serves as the local retention ordinance requiring the project to provide sufficient on-

site stormwater retention for the volume of runoff resulting from a one-hundred-year storm with a time duration which generates the maximum stormwater volume. Stormwater runoff and volume calculation, retention location and method of storage shall be performed to the satisfaction of the city engineer.

### *Chapter 17.24 Landscaping Standards*

Rancho Mirage Municipal Code Chapter 17.24, *Landscaping Standards*, provides the landscaping requirements intended in part to decrease the use of water for landscaping purposes through the use of efficient irrigation systems and climate-appropriate plant materials, balanced with the value of maintaining the aesthetic qualities through design. The water conservation practices in Chapter 17.24 are intended to be consistent with CVWD's Ordinance No. 1302.

### ***City of Rancho Mirage General Plan***

The City of Rancho Mirage General Plan 2017 has adopted various water quality goals and policies aimed at maintaining water conservation practices promoting proper stormwater management and on-site stormwater retention/detention facilities. In general, these provisions are consistent with the established mandates at the regional, state and federal level cited above.

Under the current General Plan, land use and zoning designations for the Porcupine Creek property include Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage Channels (OS-W) and Mountain Reserve (MR). The OS-W designation was originally assigned to natural or manmade floodways and drainage channels. In relation to the project site and its surroundings, these designations generally align with the existing flood control facilities, consisting of the debris basin and two channels.

## 4.9.4 Project Impact Analysis

### Thresholds of Significance

The following standards and criteria have been drawn from Appendix G: Environmental Checklist Form of the CEQA Guidelines. Development of the Porcupine Creek Retreat Specific Plan site would have a significant effect on hydrology and water quality if it is determined that the project would:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    i. Result in substantial erosion or siltation on- or off-site;

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
iv. impede or redirect flood flows?

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

## Methodology

The relevant findings throughout this section rely in part on the project site's hydrology and stormwater management conditions previously evaluated and represented in the *Porcupine Creek Estate As-Built Hydrology Report* ("As-Built Hydrology Report"), approved by the City of Rancho Mirage Public Works Department on October 9, 2014. The purpose of this engineer's report and accompanying plan was to ascertain how the various phases of design and construction leading up to the preparation of this study, complied with the local hydrologic requirements, including Section 13.05.010 of the Rancho Mirage Municipal Code, in providing adequate on-site stormwater handling and retention. In the existing baseline condition, the combined retention basin capacity integrated into the golf course design meets the on-site retention requirements, while also preventing any hydrologic impedance on the handling of off-site drainage conditions, such as those corresponding to the existing flood control infrastructure consisting of the West Magnesia Canyon Debris Basin, as well as the West and East Magnesia Canyon Channels.

It is also worth noting that in subsequent discussions, references to stormwater runoff, volumes, drainage, retention, and associated dynamics, will pertain to the temporary ephemeral conditions occurring after precipitation events, rather than the long-term or perennial drainage conditions that do not occur in the local setting. Moreover, references to the 100-year controlling storm event and retention requirements pertain to the volume of runoff resulting from a one-hundred-year storm with a time duration which generates the maximum stormwater volume.

## Project Design Features

The proposed retreat facilities and supporting improvements will occur completely within the developed Porcupine Creek grounds, which benefits from a system of surface retention basins mostly integrated into the existing golf course with a capacity to intercept, retain, and infiltrate approximately 1,230,299 cubic feet of stormwater volume. Such capacity has been found in the As-Built Hydrology Report to properly handle the design volume of 599,986 cubic feet determined by the controlling storm event for the site's condition. Based on this comparison, the existing retention facilities have a surplus capacity of

approximately 630,313 cubic feet after addressing the on-site requirements noted above. Under most circumstances, traditional development projects commonly do not have the available land to accommodate retention facilities with a surplus capacity, as these require the allocation of adequate open space. However, the engineered topographic features and landforms incorporated as depressed areas for retention in the existing golf course design have allocated ample room to accommodate such storage capacities. As explained below, the proposed development will rely on this available capacity without degrading the existing hydrologic and water quality functions.

## Project Impacts

### *a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

As previously introduced through referencing the As-Built Hydrology Report, the project site's entire hydrologic boundary is divided into nine (9) sub-drainage areas for stormwater management, within which, runoff from constructed facilities (existing buildings footprints, hardscape, pavement) and landscaped golf course surfaces is carried via controlled conveyances to their respective on-site surface basins designed to capture and infiltrate the tributary stormwater runoff. These basins or depressed areas occur at distributed locations and are incorporated into the golf course's landforms, landscaping, and design. The combined retention storage capacity currently available at the project site is approximately 1,230,299 cubic feet, which is sufficient to handle the design volume of 599,986 cubic feet for the controlling 100-year storm event. After accounting for the stormwater storage necessary to handle the existing conditions, the site as a whole has approximately 630,313 cubic feet of additional or surplus stormwater capacity distributed among the basins. This additional capacity is available due to the ample open space and landforms that make up the current golf course design.

In this existing condition, the existing retention facilities are preventing urban runoff from leaving the site and contributing any potential pollutants to the natural receiving waters (Whitewater River) or to public drain system facilities, therefore preventing the conventional surface water quality impairments or degradation that would normally occur through urban runoff discharge.

The existing site capacity to intercept, retain, and infiltrate precipitation runoff is comparable to that of an undeveloped setting, where the natural soils and vegetation cover would provide the infiltration function to minimize runoff, erosion, and siltation. As such, stormwater retention is generally regarded as a beneficial stormwater management and surface water quality protective measure. In the Flooding and Hydrology Hazards section of the City's General Plan, on-site stormwater retention is identified as one of the primary strategies to comply with the NPDES regulations, as these facilities have long been required by the City and have been deemed to benefit groundwater recharge.

Being that the existing and proposed operations will not involve any intense commercial, manufacturing, waste treatment, industrial or other land uses known to generate pollution discharge, on-site runoff

infiltration is not expected to impair the local or regional groundwater conditions. A project-specific geotechnical investigation performed by Sladden Engineering determined that groundwater in the vicinity is found at a depth greater than 50 feet below ground surface elevation. At this depth, the on-site facilities are consistent with the minimum depth of 10 feet required from retention basins.

Project implementation is expected to result in an incremental increase in the impervious cover for the site and a proportional increase in the amount of stormwater runoff being generated. The combined footprint of the proposed structures, paving, and hardscape at the 2023 buildout condition is approximately 6.52 acres, which represents approximately 3.41 percent of the 191-acre grounds and an increase of 5 percent over the existing impervious condition. Based on calculations derived from the As-Built Hydrology Report, the impervious area introduced by the project would result in a runoff increase of less than 2.3 percent in relation to the existing condition. The increase in runoff volume will utilize approximately 7 percent of the available surplus retention capacity of 630,313 cubic feet found in the existing golf course basins. Therefore, the proposed facilities would not impede the existing basins from adequately containing urban runoff on-site and from preventing discharge off-site under the storm drain design parameters. Therefore, after project implementation, the Specific Plan area would continue to comply with the City's on-site retention requirement, as codified in Section 13.05.010 of the Rancho Mirage Municipal Code and as referenced in the approved As-Built Hydrology Report. The local publicly owned storm drain facilities and Whitewater River downstream of the project would not receive stormwater runoff discharge from the project. Moreover, the existing West and East Magnesia Spring Canyon adjacent to the project would not be modified or altered by implementation of the Specific Plan, as all pertinent flood control areas are adequately preserved or are deemed not a part.

The proposed development prompts compliance with the existing regulations pertaining to water quality standards and waste discharge requirements during and after construction. As a result, the project proponent must comply with the state's most current Construction General Permit (CGP), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ. Compliance with the CGP involves the development and implementation of a project-specific Storm Water Pollution Prevention Plan (SWPPP), designed to prevent potential adverse impacts to surface water quality, including erosion and siltation, during the period of construction activity if ground disturbance exceeds one acre. The required plan will identify the limits of temporary construction-related disturbance and will indicate the specific locations where storm water Best Management Practices (BMPs) will be implemented. Storm water BMPs refer to a schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent, eliminate, or reduce the pollution of receiving waters. BMP examples also include treatment requirements, operating procedures, and practices to control project site runoff spillage or leaks. Consistent with Section XIV of the CGP, the required SWPPP must also specify the necessary recordkeeping, relevant good site housekeeping requirements, proper waste management, proper handling and storage within the allowable construction limits. The applicable SWPPP must be prepared by a qualified professional (Qualified Stormwater Pollution Prevention Plan

Developer) based on future construction and grading plans to ensure that any ground surface area disturbed by construction activities is adequately covered by the plan and compliance measures under the NPDES permit coverage. If construction projects disturb less than one acre of ground surface, a SWPPP is not required, however stormwater BMPs may still be required to address construction related runoff.

During the life of the project (post-construction), the project is expected to operate under the applicable compliance measures of a project-specific preliminary Water Quality Management Plan (WQMP) to be prepared prior to City issuance of a grading permit, to comply with the most current standards of the Whitewater River Region Water Quality Management Plan for Urban Runoff and the Whitewater River Watershed MS4 Permit. The purpose of this required plan is to ensure that proposed priority development projects prevent or address hydromodification impacts and surface water quality degradation. Based on the available retention capacity offered in the open space basins throughout the golf course, the project will meet the low impact development (LID) site design measurable goal criteria by addressing 100 percent of the runoff in retention facilities and also by preventing hydrologic modifications capable of violating the local retention requirements and regional water quality objectives that would impair or degrade local receiving waters.

In summary, the applicable level of regulatory compliance mandated from the project during the pre-construction, construction, and post-construction stages set forth the necessary stormwater and surface water quality management facilities that have previously worked in favor of the project and will continue to do so with the proposed improvements. The hydrologically self-contained condition of the project site will therefore prevent runoff discharge capable of degrading local surface water quality conditions or violating discharge requirements. Less than significant impacts are anticipated.

### *b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin*

As previously introduced, the Coachella Valley Groundwater Basin is the primary groundwater source for the project region, with Coachella Valley Water District (CVWD) being the domestic water purveyor serving the project site. The Coachella Valley Groundwater Basin has an estimated storage capacity of 40 million acre-feet (AF) of water within the upper 1,000 feet and is divided into four subbbasins: Indio, Mission Creek, Desert Hot Springs, and San Gorgonio.

Groundwater is pumped by local wells and distributed for drinking and irrigation purposes. To offset the amount of water pumped by local wells, the region's water agencies import water from the Colorado River to replenish the basin, recycle wastewater for irrigation, and incentivize conservation – this is called "groundwater management". Local water agencies have been working on groundwater management since the 1940s when local leaders began importing water to supplement local groundwater supplies.

Historically, more groundwater has been pumped out of the Indio Subbasin each year than the amount of water that naturally replenishes the groundwater basin. Overdraft occurs when a groundwater basin has pumping (demands) that exceed recharge (supplies) over the long term. Agencies within the Indio Subbasin began to actively manage the Subbasin in 2002 with development of the 2002 Coachella Valley Water Management Plan in order to address this issue. This plan was updated in 2010 to document the accomplishments in reducing overdraft and to address changed conditions since 2002. Coachella Valley Water District (CVWD), Coachella Water Authority (CWA), Desert Water Agency (DWA), and Indio Water Authority (IWA) collectively represent the Indio Subbasin GSAs. In January 2017, the GSAs submitted to DWR the 2010 Coachella Valley Water Management Plan (2010 CVWMP), accompanied by an Indio Subbasin Bridge Document, as a SGMA-compliant Alternative Plan. On July 17, 2019, DWR approved the Alternative Plan with a requirement to submit an Alternative Plan Update by January 1, 2022 and every five years thereafter. Based on the Indio Subbasin SGMA documentation, the combined strategies have resulted in significant groundwater storage increases across the subbasin, thus allowing the region to comply with the framework for sustainable management.

CVWD works with other local water agencies and Coachella Valley stakeholders to implement water conservation, water reuse, and groundwater recharge strategy to ensure water availability and system capacity to meet the growing needs of the Coachella Valley. CVWD collaborates with the operation and maintenance of three replenishment facilities serving the Indio Subbasin: Whitewater River Groundwater Replenishment Facility, the Thomas E. Levy Groundwater Replenishment Facility, and the Palm Desert Groundwater Replenishment Facility.

In 2014, the California Legislature signed a three-bill legislative package into law, collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA allows local agencies to manage groundwater resources in a sustainable manner, with management efforts tailored to the resources and needs of their specific communities. Groundwater management is described as the planned and coordinated monitoring, operation, and administration of a groundwater basin sustainability. The Coachella Valley Groundwater Basin is designated by DWR as a medium priority basin. CVWD is the Groundwater Sustainability Agency (GSA) for the majority of the eastern portion of the Indio Subbasin, including the area that underlies the project area. Since groundwater management has been a historic effort in the Coachella Valley, local agencies have been able to adapt their current measures as part of their sustainability plan.

Artificial replenishment, or recharge, is recognized by the water districts as one of the most effective methods available for preserving local groundwater supplies, reversing aquifer overdraft and meeting demand by domestic consumers. According to the CVWD web site on Groundwater Replenishment and Imported Water, local agencies have percolated over 650 billion gallons of water back into the aquifer to date. In the central part of the Coachella Valley, groundwater recharge is provided by the recently constructed first phase of the Palm Desert Groundwater Replenishment Facility, operated by CVWD. According to the CVWD web site, this facility is expected to add up to 25,000 acre-feet of Colorado River

water annually into the aquifer. Combined with water conservation and efficiency requirements, individual development projects can contribute to groundwater sustainability by implementing the required stormwater runoff retention and infiltration facilities. The proposed project location will not impede or conflict with any existing or planned groundwater recharge facility.

As further explained in the Utilities and Service Systems section of this document, the project site presently receives potable water from CVWD through an existing connection that will remain in place. Existing golf course and open space areas are irrigated from an offsite well. Water use for the golf course and landscaped areas is not expected to increase as part of this project. Project implementation would involve on-site improvements to accommodate the new facilities expected to result in a project-wide demand of 25.27 acre-feet per year at buildout condition. The analysis presented in the Utilities and Service Systems section has found that there are sufficient water supplies to meet the project demands.

Section 13.05.010 of the Rancho Mirage Municipal Code establishes a requirement of on-site storm water retention for the volume of runoff resulting from a one-hundred-year storm with a time duration which generates the maximum storm water volume. The proposed development aligns with the local and regional groundwater recharge strategies and complies with the local retention ordinance by implementing on-site infiltration facilities as part of the site design and improvement plans. The proposed development will continue relying on the existing retention basins capable of infiltrating stormwater runoff resulting from the existing and proposed conditions. As such, the entire volume of storm water runoff generated on-site up to the 100-year event will be percolated on-site, contributing to groundwater recharge.

Moreover, the project will implement water conservation measures in accordance with the applicable landscape ordinance requirements pertaining to water efficient irrigation systems and drought-tolerant plant selection (Rancho Mirage Municipal Code 17.24). Interior fixtures are also expected to be water efficient, thus complying with the local water conservation strategies. Therefore, the project is not expected to interfere with the regional groundwater recharge efforts or groundwater sustainability for the regional basins. Less than significant impacts are anticipated.

### *c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

#### *ci. Result in substantial erosion or siltation on- or off-site*

As previously discussed, the project site is currently developed with a golf course and private estate facilities, the design of which has incorporated stormwater conveyance and retention functionality. As indicated in the Biological Resources section of this DEIR, the project site is absent of any natural riparian habitats, springs, streams, or other natural water courses. All on-site drainage patterns are artificial and determined by engineered improvements that are actively maintained with the rest of the developed

grounds. These drainage patterns are controlled through a combination of grass lining, paved lining or piping, which are stabilized conveyances that currently prevent instances of erosion and siltation, compared to an un-stabilized condition with exposed soils. Of the 191-acre site, an impervious footprint of approximately 6.52 acres (3.41 percent) will be occupied by the proposed facilities, the extent of which will be distributed and integrated into the site design, rather than being aggregated into a single area. In doing so, the existing stormwater conveyances in each drainage area would not be substantially altered by grading or construction associated with project implementation. The incremental increase in stormwater runoff volume resulting from the project's addition of impervious surfaces (buildings and hardscape) will be adequately managed through the available retention capacity previously discussed. Existing maintenance of the golf course and associated drainage facilities will continue to occur during the life of the project, preventing instances of substantial on-site soil erosion or siltation. The existing off-site tributary areas handled through the West and East Magnesia Spring Canyon Channel facilities will not be altered by the proposed development. During the period of construction, activities will be regulated by a storm water pollution prevention plan or appropriate BMPs, which include regulatory measures to control erosion, siltation, and other short-term conditions. As such, pertaining to erosion or siltation on- or off-site, less than significant impacts are expected.

### *cii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

As introduced above, the project site's stormwater management is presently handled by an on-site storm drain system with retention facilities integrated into the golf course setting to intercept, control, and infiltrate on-site runoff. The proposed improvements are expected to occupy an impervious footprint of approximately 6.52 acres out of the 191-acre site. Based on calculations derived from the As-Built Hydrology Report, the impervious area introduced by the project would result in a stormwater runoff increase of less than 2.3 percent in relation to the existing condition, which in turn would utilize up to 7 percent of the available surplus retention capacity found in the existing golf course basins.

The project site is served by a private on-site stormwater system with multiple retention basins sized to handle the design storm event volume of 599,986 cubic feet and maintain a surplus retention capacity of 630,313 cubic feet to prevent flooding on- or off-site. The incremental increase in stormwater volume resulting from proposed facilities will be adequately handled by the available surplus retention capacity, such that at project buildout, the existing facilities would not be impeded from maintaining adequate on-site containment and flood prevention of existing and proposed facilities. As mandated by the approved As-Built Hydrology Report, the project is not permitted or proposing to introduce physical improvements capable of interfering or altering the existing functionality of the off-site publicly owned channels (West Magnesia Canyon and East Magnesia Canyon). Regarding project runoff increases and the associated flood conditions, on- or off-site site, less than significant impacts are anticipated.

### *ciii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

As noted in the preceding discussions, stormwater runoff volume generated from the existing site condition is intercepted and retained by the existing storm drain infrastructure integrated into the golf course setting. The retention basins are sized to contain the controlling 100-year storm event runoff volume from existing development (599,986 cubic feet), while benefiting from a surplus retention capacity of 630,313 cubic feet. Under this condition, the site does not involve the release of runoff into the City's off-site storm drain system or Whitewater River. Accordingly, the site does not contribute existing sources of pollutants.

The updated analysis relying on the As-Built Hydrology Report estimates that the incremental increase in proposed buildings, hardscape, and otherwise impervious cover totaling approximately 6.52 acres would generate an associated stormwater runoff volume increase of less than 2.3 percent during the controlling 100-year storm event. Such incremental increase, combined with the existing runoff condition, would not exceed the existing on-site retention capacity and therefore would not cause the property to release runoff or additional sources of pollution.

Off-site drainage from hillside tributary areas is separately handled by the existing off-site debris basin and two offsite formal channels, which are publicly owned and maintained. Similarly, this project does not propose physical improvements that would impair the capacity of these facilities. The West Magnesia Canyon Channel Debris Basin and the connected West Magnesia Canyon Channel would continue to operate as designed, without receiving any significant amount of project runoff. At the south portion of the golf course, the existing landscaped ridge feature that functions as the northern training dike for the containment of on- and off-site tributary runoff, would remain unchanged, and the easterly runoff conveyance to the off-site East Magnesia Canyon Channel would continue to occur as designed. Regarding project runoff contribution capable of creating a burden on existing or planned stormwater infrastructure, or substantial increases in polluted runoff, less than significant impacts are anticipated.

### *civ. Impede or redirect flood flows?*

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) serve as the basis for identifying potential hazards and determining the need for and availability of federal flood insurance. As previously mentioned, FEMA flood zone designations rely on a variety of flood risk information based on historic, meteorological, hydrologic and hydraulic data, as well as existing development, open space and topographic conditions within an area. FIRM data and corresponding zone designations are represented in numbered panels. The applicable FIRM Panel to the project site is identified as Panel Number 06065C2206G, effective August 28, 2008

As previously discussed, the Project site is protected from off-site hillside drainage by existing public flood control infrastructure consisting of one debris basin and two offsite channels designed to convey flows to the Coachella Valley floor and eventually Whitewater River. The ephemeral nature of local drainage translates to short-term duration after storm events, rather than continuous or long-term flows. The presence of this flood control infrastructure allows the majority of the project site to operate under reduced risk of flooding.

Of the project site's 191-acres, approximately 173.7 acres (90 percent) have a FEMA designation of Zone X, which is deemed not to be a high-risk area or a Special Flood Hazard Area (SFHA) according to FEMA criteria. Within this Zone X designation, the southernmost 29.3 acres have a sub-type distinction of being an area of minimal flood hazard due to their hillside location at relatively higher elevations compared to the rest of the site. The second sub-type distinction of Zone X (shaded) applies to the remaining 144.4 acres, corresponding to areas subject to the 0.2 percent annual chance flood hazard. The Zone X (shaded) distinction covers all existing structures and most of the golf course development.

A 14-acre southern portion of the project site, at the base of the Santa Rosa Mountains, has a FEMA Zone A designation, which applies to areas with a 1-percent annual chance of flooding and any construction in this zone would be required to comply with FEMA requirements. This specific area is occupied by the existing golf course setting and does not contain any existing or proposed habitable structures. The remaining portion of Zone A, totaling approximately 3.3 acres generally corresponds to the concrete-lined West Magnesia Canyon Channel and peripheral areas.

Project implementation to the buildout condition will not result in physical improvements or stormwater runoff discharge that would obstruct, impede, or otherwise direct designated flood zones. There are no existing or proposed habitable structures in high risk flood zone designations. Regarding potential impedances or redirection of flood flows, less than significant impacts are anticipated.

### *d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation*

As indicated above, FIRM Panel Number 06065C2206G, applicable to the site since August 28, 2008, identifies the current FEMA flood zone designations, which are categorized by lettered identifiers with corresponding levels of risk. Approximately 173.7 acres (90 percent) of the 191-acre site has a FEMA designation of Zone X, which applies to areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. Insurance purchase is not required in these zones. The remaining 17.3 acres (10 percent) of the project site have a designation of Zone A, which applies to areas with a 1-percent annual chance of flooding. The Zone A portion includes the concrete-lined West Magnesia Canyon Channel, peripheral areas, and a southern portion of the golf course setting. As such, there are no existing or proposed habitable structures in Zone A designations. Project implementation leading to the buildout condition is not expected to result in any proposed retreat facilities or habitable

structures outside of the Zone X designation. The existing Zone A portions corresponding to the flood control channel and golf course areas will remain unchanged and as previously analyzed for flood and stormwater management in the governing As-Built Hydrology Report.

Moreover, the project is not located near any coastal areas and therefore is not prone to tsunami hazards. The project is not located near any large body of water or any area recognized for being susceptible to seiche risk. Existing artificial water features within the project site have been constructed by prior engineering plans and are actively maintained. The off-site debris basin and associated flood control channels have been designed for the corresponding off-site tributary flows occurring after storm events and therefore do not involve the permanent or continuous stormwater storage or containment. The existing potable water reservoirs owned by CVWD have been constructed in compliance with the seismic requirements. On-site inundation conditions are prevented by the previously discussed stormwater retention facilities. Therefore, pertaining to flood, tsunami, seiche zone, or pollutant releases associated with project inundation, less then significant impacts are expected.

### *e. Conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan*

As discussed previously, the project proponent is expected to implement a project-specific Water Quality Management Plan (WQMP) to comply with the most current standards of the *Whitewater River Region Water Quality Management Plan for Urban Runoff* and the *Whitewater River Watershed MS4 Permit.* This type of compliance document also applies to the post-construction (operational) stage of the project. The content and methodology of the project-specific WQMP is determined in the *Whitewater River Region, Water Quality Management Plan Guidance Document*, dated June 2014 and revised in January 2015. The primary objective of the WQMP is to ensure that the land development proposals prevent or minimize the impact of Urban Runoff on Receiving Waters to the Maximum Extent Practicable (MEP). This objective is achieved through the review of project-specific existing and proposed conditions to install desert-appropriate, post-construction Best Management Practices (BMPs) meeting the criteria of Low Impact Development (LID) standards. The LID standards are established in the *Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development* (Handbook).

The project-specific WQMP is a type of compliance document that is prepared concurrently with the grading and associated engineering plans, all of which must be consistent with the governing As-Built Hydrology Report. Aspects of the WQMP include an evaluation of existing conditions; an assessment of the regional surface water quality impairments; an assessment of the proposed land uses; and identification of source control and site design measures (BMPs) to handle runoff resulting from the proposed development. Being that the developed project site has existing storm drain infrastructure (conveyances and retention basins) with surplus capacity, runoff volume from proposed improvements leading up to the buildout condition will be adequately retained on-site and allow the project to meet

the local retention ordinance condition in the WQMP. Moreover, since the entire site's runoff is being handled by existing Low Impact Development (LID) retention basin facilities, without resulting in off-site release or discharge, the project is capable of adequately meeting the measurable goal summary using this approach. By comparison, a traditional land development project would need to allocate land for facilities to retain or treat runoff. The WQMP will also include the required operation and maintenance guidelines to ensure that on-site facilities are actively maintained for effectiveness. With implementation of the project-specific WQMP, the operational aspects of the project will comply with the regulatory water quality objectives.

Moreover, establishing consistency with the sustainable groundwater management plan strategies applicable at the regional local level will be achieved by continuing to integrate the existing retention facilities, which through their function allow project runoff to be intercepted and infiltrated on-site. The existing site capacity to intercept, retain, and infiltrate precipitation runoff is comparable to that of an undeveloped setting, where the natural soils and vegetation cover would provide the infiltration function. Use of the existing on-site facilities would be consistent with Section 13.05.010 of the Rancho Mirage Municipal Code in continuing to allow for stormwater retention for the volume of runoff resulting from a one-hundred-year storm with a time duration which generates the maximum storm water volume. The on-site retention aspect of the project (existing and proposed) is also consistent with the stormwater capture strategy identified in the 2018 Coachella Valley Integrated Regional Water Management and Stormwater Resources Plan. In this regional plan, stormwater capture has been identified as a method to augment local water supplies in the Coachella Valley by allowing on-site infiltration, rather than the release of urban runoff. As such, project implementation would not obstruct the facilities, capacities or strategies identified in the governing groundwater management and stormwater resources planning. Less than significant impacts are anticipated.

### 4.9.5 Cumulative Impacts

As evaluated in this section, project implementation involving new facilities within the existing developed grounds is expected to result in an incremental increase in impervious cover associated with the additional building footprints and hardscape facilities. However, the nature, scale and extent of the proposed uses would not amount to a quantitative burden to the existing hydrologic and water quality function of the off-site or on-site stormwater infrastructure. The combined footprint of the proposed structures and hardscape at buildout condition is approximately 6.52 acres, which represents approximately 3.41 percent of the 191-acre grounds. Based on calculations derived from the As-Built Hydrology Report, the impervious area introduced by the project would result in a stormwater runoff increase of less than 2.3 percent in relation to the existing condition, which in turn would utilize up to 7 percent of the available surplus retention capacity found in the existing golf course basins. The increase in runoff volume will be adequately handled on-site by the surplus retention capacity of 630,313 cubic feet found in the existing golf course basins. As such, the commonly known impacts of land development

that result in land use conversions lowering the land capacity to intercept, retain, and infiltrate stormwater runoff are not foreseeable significant impacts resulting from this project. By association, the proposed project is not expected to result in conditions that substantially increase stormwater runoff volume, time of concentration, or peak discharge that in turn would burden the local municipal stormwater system or cause hydromodifications that worsen surface water quality impairments. The existing regulatory framework established at the federal, state, regional, and local level is inherently designed to prevent land development activities from incurring or causing such hydrologic or water quality impacts. Stormwater management and adherence to surface water quality standards are achieved through mandated measures rather than voluntary actions, such that physical disturbance, vegetation clearing, earth movement, grading, and construction activities are not permitted without demonstrating compliance to the local, regional, and state permitting authorities at each applicable stage. As such, the project is not expected to result in cumulative impacts to hydrology or water quality.

## 4.9.6 Mitigation Measures

The proposed project will not have any significant impacts relating to hydrology or water quality, and therefore, no mitigation is required.

## 4.9.7 Level of Significance After Mitigation

The aspect of hydrology and water quality do not involve significant impacts requiring mitigation.

## 4.9.8 Resources

1. City of Rancho Mirage General Plan 2017, Flooding and Hydrology Hazards Section of the Safety Element (Chapter 8), 2017.
2. Federal Clean Water Act (CWA), Environmental Protection Agency, https://www.epa.gov/laws-regulations/summary-clean-water-act
3. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06065C2206G, effective August 28, 2008.
4. Indio Subbasin Sustainable Groundwater Management Act (SGMA) Plan.
5. Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), January 2019.
6. Whitewater River Region Water Quality Management Plan for Urban Runoff and the associated Whitewater River Watershed MS4 Permit, effective June 20, 2013.
7. 2018 Coachella Valley Integrated Regional Water Management and Stormwater Resources Plan, December 2018.

# 4.10 Land Use and Planning

## 4.10.1 Introduction

This section of the Draft EIR addresses potential impacts associated with land use and planning that may occur with implementation of the proposed Porcupine Creek Retreat Specific Plan project ("project"). The project history related to land use, existing conditions, and development within the project site are described in this section along with potential impacts relating to development of the proposed project. The *Porcupine Creek Retreat Specific Plan*, the *City of Rancho Mirage General Plan*, and the *Coachella Valley Multiple-Species Habitat Conservation Plan* were utilized in the analysis of this land use and planning section.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with land use compatibility and the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to land use and planning in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Would the project physically divide an established community?*

- The project property currently operates as a private estate with golf course and recreational amenities, albeit portions of golf course are located beyond the project area. The Porcupine Creek property lies north and east of the Santa Rosa Mountains and west of the Magnesia Falls Cove, a medium density residential neighborhood. The project is proposing the construction and renovation of the site to include up to 50 studio, single-bedroom, and multi-bedroom keys, and associated upgrades, which includes a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, additional resort and hotel related facilities, and a rerouted 18-hole golf course. The proposed project will remain within the boundaries of the proposed Specific Plan, which comprises approximately 191-acres of the existing 230-acre Porcupine Creek property (which staff has confirmed through consultation with the Coachella Valley Mountains Conservancy excludes the mountainous lands that are adjacent to the Specific Plan property).

Impacts found to be less than significant are further discussed in **Section 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms, definitions, and acronyms used in this Draft EIR.

## 4.10.2 Existing Conditions

### Existing Property Conditions

The Porcupine Creek Retreat project area covers approximately 191-acres of the 230-acre private estate property in the southern portion of Rancho Mirage, California. The project area currently operates as the private estate, "Porcupine Creek", and is developed with an existing 25,000 square foot main residence and adjacent casitas, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessory and shade structures. Currently, the total building areas on the estate is approximately 66,500 square feet. In addition, the owner intends to add two additional villas and a fitness pavilion to the private estate during 2020, as permitted under existing entitlements. These improvements, with related utility improvements, will add approximately 15,000 square feet of additional building footprints. In addition to the residences, the property also accommodates various private recreational amenities, including portions of a previously approved 19-hole golf course, tennis pavilion with three tennis courts, pool and spa area with private spa treatment rooms, and fitness center.

The owner and guests arrive at the property via a manned gatehouse at the Dunes View entry gate, while staff and deliveries arrive at the manned secondary entrance off Mirage Road. A third entry point is located at the southeastern entry point at the western terminus of Magnesia Falls Drive. This entry point is also gated and is for emergency access and special purpose use.

In addition to the estate and recreational uses on the property, the Porcupine Creek Retreat Specific Plan area includes drainage channels on the northwestern property boundary and through the southern portion of the property.

The southern portion of the private estate, which includes some existing tee box areas of the previously approved 19-hole golf course, has been excluded from the proposed Porcupine Creek Retreat Specific Plan. These areas are located upon the slopes of the Santa Rosa Mountains which are considered mountainous lands within the CVMSHCP conservation area which as confirmed with the Coachella Valley Mountains Conservancy is located entirely beyond the boundaries of the proposed Specific Plan area. Since these areas are located beyond the project area and there are no requests to approve any additional improvements or uses or modifications to any of the existing improvements or uses situated therein, there shall be no impact on any the existing improvements or uses situated within this extraterritorial area. As such, there will not be any consequential direct impacts or reasonably foreseeable indirect impacts to the environment caused by any action the City may take with respect to the proposed project or the maintenance of the status quo of such existing improvements or uses, such as but not limited to any pre-existing encroachments onto any protected lands beyond the boundaries of the proposed Specific Plan area.

## Project Site History

The project property was initially entitled in 1997 and thereafter and constructed as a private estate with various recreational amenities. Since 2011, the property has been remodeled and upgraded to its existing conditions, including to the 19-hole golf course, parts of which are located beyond the boundaries of the proposed Porcupine Creek Retreat Specific Plan. As such, those parts of the golf course which are located outside of the Specific Plan area will not be affected in any manner by any action City has been requested to take on the proposed project. Additions to the property included spa treatment rooms, a tennis pavilion a fitness center, a gate house, and two new villas, adding approximately 18,000 square feet to the site's total building footprint. In addition, a large portion of the landscape and irrigation on the property has been rethought, rehabilitated, and in some cases, completely recreated.

## Surrounding Land Uses

The Porcupine Creek property is surrounded by the Santa Rosa Mountain reserve to the north, west and south, Rancho Mirage Elementary School to the northeast, and the medium density, single-family residential neighborhood, Magnesia Falls Cove, to the east. **Table 4.10.1, *Surrounding Land Uses***, shows the land uses and land use designations of the properties north, south, east, and west of the project property, as established by the City of Rancho Mirage.

**Table 4.10.1 Surrounding Land Uses**

| Location | General Plan/Zoning | Exiting Use |
|---|---|---|
| North | MR, OS/W | West Magnesia Storm Channel, Mountain Reserve Hillside |
| South | MR | Mountain Reserve Hillside |
| East | P, R-M | Rancho Mirage Elementary School, Magnesia Falls Cove Neighborhood |
| West | MR | Mountain Reserve Hillside |

## Existing General Plan and Zoning Designations

**Exhibit 4.10.1, *Existing General Plan & Zoning Designations***, shows the General Plan land use and zoning designations currently established for the project property. The land use and zoning designation for the Porcupine Creek property includes Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage Channels (OS-W) and Mountain Reserve (MR). The definitions for the existing designations, as defined by the General Plan and Zoning codes, are provided as followed:

### *Very Low Density Residential*

The Very Low Density Residential designation (R-L-2) provides for single-family residential development typically on individual lots of about 0.5 acres. Planned residential developments are also an appropriate land use under this designation. Lands with this designation may serve to buffer more dense residential development from estate residential uses. R-L-2 designations allow 0 to 2 dwelling units per acre (du/ac).

This area of the project property occupies approximately 6.52 acres of the site and is allotted to the existing main residence, casitas, villas, and associated residential facilities.

### *Private Open Space*

The Private Open Space designation (OS-PV) is assigned to golf courses, lakes and water features, tennis courts, and other recreational facilities and landscaping that occur in Planned Residential Developments (PRDs).

This area of the project property occupies approximately 139.73 acres of the site and is allotted to the private golf course and open space areas throughout the project.

### *Floodways and Drainage Channels*

The Floodways and Drainage Channels designation (OS-W) is assigned to natural or manmade floodways and drainage channels. This area is designated to the West Magnesia Storm Channel along the property's northwestern boundary, and the East Magnesia Storm Channel which traverses the property's southern portion.

### *Mountain Reserve*

The Mountain Reserve designation (MR) is assigned to public lands or property subject to conservation easements in the Santa Rosa Mountains. Uses are limited to recreational activities, such as hiking or equestrian and non-motorized bike trails and facilities consistent with the need to protect sensitive biological resources. Vehicular access is not permitted in this designation.

The Mountain Reserve portion of the project property occurs in the southern portion of the site, at the slope of the Santa Rosa Mountains.

## Proposed General Plan and Zoning Designations

The Porcupine Creek Retreat Specific Plan proposes the redevelopment of the property from a private estate to an exclusive retreat. Proposed expansions to the site are anticipated to include a modified main house, new restaurant, upgraded spa and fitness complex, additional casitas and villas, supporting resort related facilities, staff and back of house facilities, and a rerouted 18-hole golf course among other landscape enhancements, uses, and amenities. The proposed additions could expand the total building area on the property from 66,500 square feet to approximately 250,000 square feet.

To ensure General Plan and Zoning consistency with the new uses, the project will pursue entitlement approvals such as a Specific Plan (SP), Development Agreement (DA), General Plan Zoning Map Amendment, and Preliminary Development Plan (PDP) for the 191-acre retreat property. The G*eneral* P*lan Zoning Map Amendment* will amend the General Plan land use designation and zoning from R-L-2 and OS-PV to "Specific Plan", with and overlaying zoning designation of Resort Hotel (Rs-H). **Exhibit 4.10.2*, Conceptual General Plan and Zoning Designations***, illustrates the proposed land use designations on the project site. In addition, the City will process a lot line adjustment to create a single legal parcel for the Specific Plan property, as well as two separate legal parcels for the mountainous lands that will be excluded from the proposed Specific Plan. The Resort Hotel and Specific Plan land uses, as defined by the City of Rancho Mirage, are defined as follows:

### *Resort Hotel*

The Resort Hotel designation (Rs-H) allows for the development of hotels and destination resorts with limited, ancillary commercial uses, such as spas, recreational facilities, restaurants, lounges, and small retail shops that directly support the primary use. Rs-H land uses allows a Floor Area Ratio (FAR) of 0.25.

The Rs-H underlaying designation will allow uses compatible with Resort Hotel land use designations in the Specific Plan area.

### *Specific Plan*

The Specific Plan designation is used in conjunction with other underlying land use designation and requires the development of a document that defines a project's land use and design standards. It is also appropriate as a means of processing large-scale community commercial and mixed-use development proposals. Specific plans provide detailed plans, concepts, and designs of large-scale complex projects indicating the distribution, location, and intensity of proposed land uses. They also identify the required level and availability of public facilities and services as well as the economic viability of proposed developments.

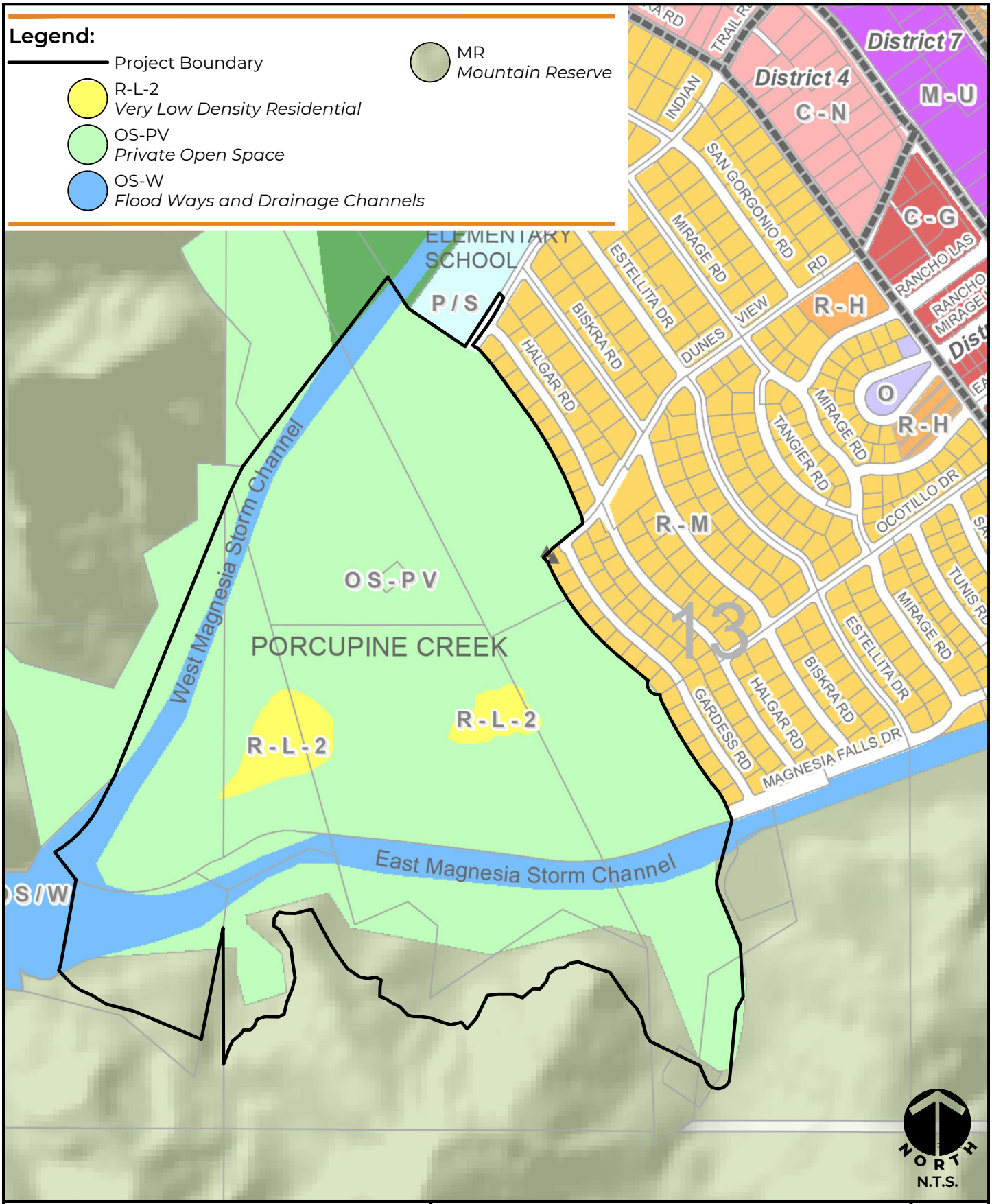
The Porcupine Creek Retreat Specific Plan project proposes two basic land uses within the SP area. The proposed land uses include Estate/Retreat and Flood Control Channel. The proposed land uses are defined below.

#### *Estate/Retreat*

The Estate/Retreat use will encompass approximately 183.3 acres and covers the existing estate compound as well as necessary enhancements for buildout of the all-inclusive retreat. The footprint of this area has already been entirely developed with manmade improvements such as buildings, driveways, parking areas, golf course, fairways, recreational facilities, pools, pathways, utilities, as well as other supporting site, building and landscape improvements. Retreat enhancements will be designed and integrated in a manner compatible with the existing estate compound.

### *Flood Control Channel*

The 7.7-acre Flood Control Channel area contains facilities associated with the CVWD flood control channel including concrete flood channel, fencing, access road, and storage/maintenance buildings. The flood channel and maintenance road serve as a physical barrier between the Estate/Retreat and the natural desert/hillside areas to the northwest (including Blixseth Park.) The existing West Magnesia Canyon Channel was constructed as a concrete-lined facility to intercept and convey tributary hillside runoff in a manner that protects Porcupine Creek estate and downhill development. The design and construction of these flood protection facilities is the result of prior hydrology studies, further explained in **Section 4.9, *Hydrology and Water Quality***. The developed site is physically protected by the established and actively maintained flood control facilities.

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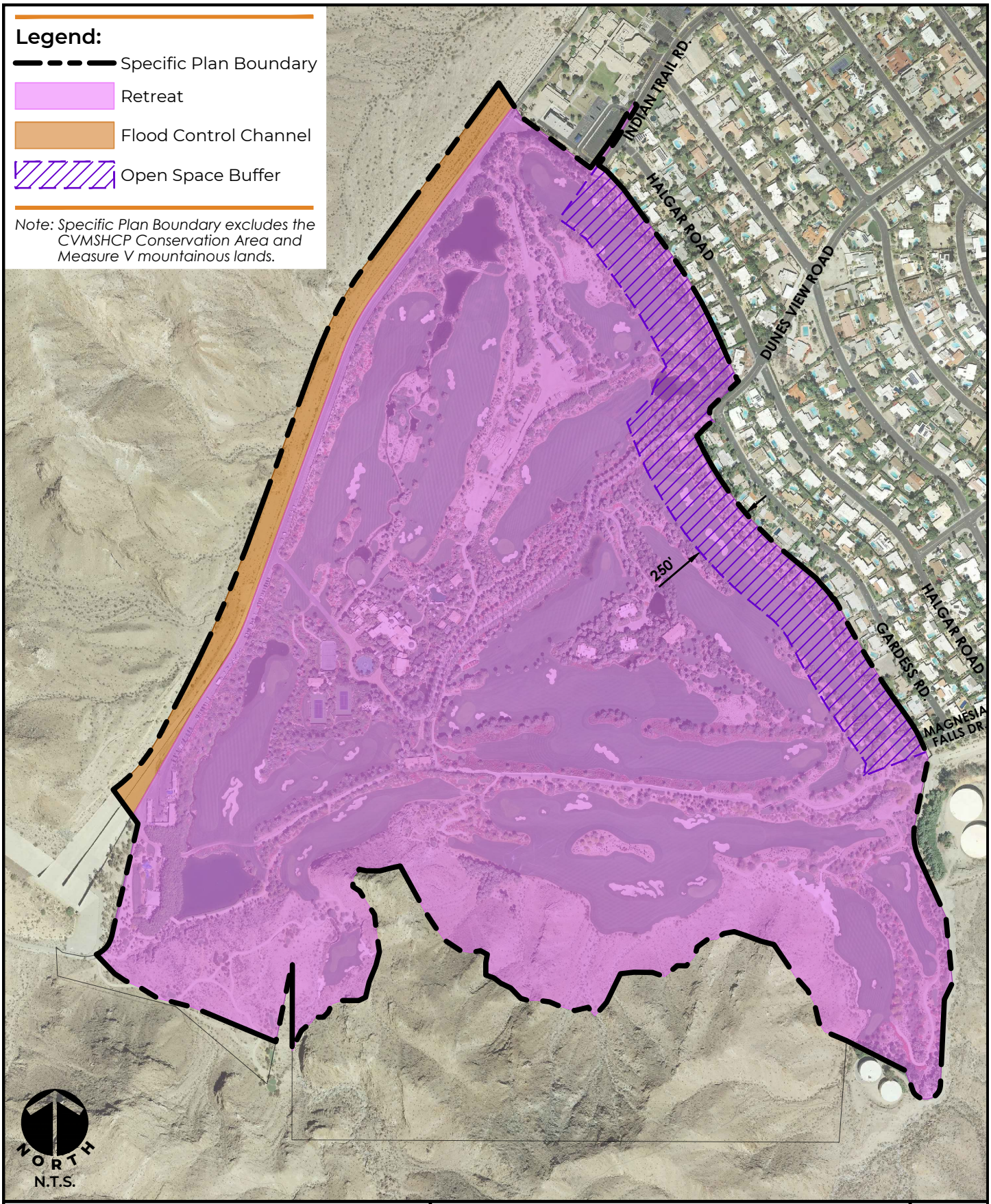
# EXISTING GENERAL PLAN & ZONING DESIGNATIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.10.1*

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# CONCEPTUAL GENERAL PLAN & ZONING DESIGNATIONS

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT

*4.10.2*

## 4.10.3 Regulatory Setting

### Regional

#### *Coachella Valley Association of Governments*

The Coachella Valley Association of Governments (CVAG) is the regional planning agency coordinating government services in the Coachella Valley. CVAG is composed of several departments, including an Energy and Environmental Resources Department and Transportation Department. The Energy and Environmental Resources Department promotes sustainable use of natural resources and preserving the natural heritage of the Coachella Valley by implementing plans relating to energy and air quality, waste management, water, habitat conservation, and trails.

#### *Coachella Valley Conservation Commission*

The Coachella Valley Conservation Commission (CVCC) is a joint powers authority comprised of members of the Riverside County Board of Supervisors, an elected official from each of the cities, and a member of the Board of Directors of the Coachella Valley Water District, Imperial Irrigation District, and Mission Springs Water District. Implementation of the Coachella Valley Multiple Species Habitat Conservation Plan is overseen by the CVCC. The CVCC provides policy direction for the plan, and opportunities for public participation in the decision-making process. Additional CVCC responsibilities include overseeing the Monitoring Program Administration, establishing a Reserve Management Unit, participating in the Joint Project Review Process, and preparing an Annual Report.

#### *Coachella Valley Multiple Species Habitat Conservation Plan*

The Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) is a regional multi-agency conservation plan that provides for the long-term conservation of ecological diversity in the Coachella Valley. The CVMSHCP includes an area of approximately 1.1 million acres in the Coachella Valley. The CVMSCHP ensures the conservation of the covered species and conserved natural communities in perpetuity.

##### *Land Use Adjacency Guidelines*

The Land Use Adjacency Guidelines were established by the CVMSHCP for projects adjacent to conservation areas. The purpose of the Guideline is to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. The following Land Use Adjacency Guidelines will aid in minimizing edge effects and shall be implemented where applicable.

4.5.1 Drainage

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

4.5.2 Toxics

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

4.5.3 Lighting

For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area.

4.5.4 Noise

Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area.

4.5.5 Invasives

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in the Project-Specific Biology Report. The plants listed in the Biology Report shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.

4.5.6 Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

4.5.7 Grading/Land Development

Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

## Local

### *Rancho Mirage General Plan*

Compliant with California Government Code Section 65300, the Rancho Mirage General Plan (RMGP) was designed to function as an integrated, internally consistent and compatible statement of policies that regulates the development of lands within the City's corporate boundaries and Sphere of Influence (SOI). The RMGP discusses land use, circulation, housing, natural resources, environmental hazards, and public infrastructure and services with the City of Rancho Mirage and SOI.

The Land Use Element of the RMGP provides a comprehensive plan of the general allocation and distribution of land uses throughout Rancho Mirage. The element serves as a statement of the standards and targets for population density and building intensity by identifying areas planned for residential, commercial, and public uses. Within the Land Use Element (LU), the City outlines goals, policies and programs in order to identify and implement land use objectives for the City of Rancho Mirage pursuant to California Government Code 65041.1. Land Use goals and policies relevant to the proposed project are provided in discussion b of this Land Use and Planning Section.

The City employs a "single-map" system of land uses, which means that the City's General Plan land use designations are the same as the City's zoning designations. The density and intensity standards expressed in the General Plan are the same as those expressed in the City's Zoning Ordinance.

### *Rancho Mirage Municipal Code*

The Rancho Mirage Municipal Code (RMMC) acts as a regulatory guideline, compliant with state and federal laws, for the City of Rancho Mirage. The RMMC regulates businesses, zoning, animals, vehicles and traffic, peace and morals, health and safety, and more. Regulations regarding land use and zoning are discussed in great detail within Title 17, Zoning, in the RMMC. The purpose of the Zoning Code within the RMMC is to implement the policies of the Rancho Mirage General Plan by classifying and regulating the uses of land and structures within the City of Rancho Mirage. The Zoning Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents, and businesses in the City. The Municipal Code provides standards and guidelines for buildings and land uses throughout the City.

- Chapter 17.54, Specific Plans: A specific plan is designed to provide flexibility, innovative use of land resources and development, a variety of housing and other development types, and an equitable method of vehicular access.
- Chapter 17.10, Commercial and Industrial Districts: Per the Municipal Code, Rs-H Zones are applied to areas appropriate for hotels and destination resorts, including condo-hotel projects,

with limited ancillary commercial uses, including restaurants and health spas that directly support the primary use.

## 4.10.4 Project Impacts

### Thresholds of Significance

The thresholds for this section are derived from Appendix G of the CEQA Guidelines, and are used to determine the level of potential effect. The significant criteria are at based on the recommendations set forth in Section 15064 of the CEQA Guidelines. For analysis purposes, the proposed project would have a significant effect on land use and planning if it is determined that the project will:

a. Physically divide an established community?
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Threshold topic "a" is not analyzed further since screening criterion related to surrounding established communities concluded that there would be no impacts or less than significant impacts. See 4.10.1, *Introduction,* of this Land Use and Planning Section.

### Methodology

The determination of the Project's consistency with applicable land use plans and policies is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions at and around the project site. Additionally, the Porcupine Creek Retreat Specific Plan was utilized in the analysis of the project's impacts on City land uses. The Specific Plan outlines the proposed land use of the project and is intended to guide future development within the Specific Plan boundary. The establishment of site specific development standards, land use regulations, and programs are set forth in the Specific Plan to guide the development of the property in a manner that is consistent with the Rancho Mirage General Plan while maintaining flexibility to respond to changing conditions that factor in any long-term development. The Specific Plan implements all applicable elements of the General Plan and includes detailed information about the site's master plan and infrastructure improvements.

### Project Design Features

The Porcupine Creek Retreat project proposes the development of an exclusive retreat property with retreat, open space recreational uses, as well as drainage floodways. The project proposes to develop up to 50 studio, single bedroom, and multi-bedroom "keys", as well as a modified main house, a new restaurant and dining deck, and upgraded spa complex, additional casitas and villas, upgraded and additional resort and hotel related facilities, and a rerouted 18-hole golf course. As presently occurs, the dining, golf, and spa facilities will be available to retreat guests and will not be open to the general public.

In addition to the existing open space and recreational amenities, the project may contain amenities, including but not limited to:

- Golf course and driving range
- Tennis courts
- Hiking trails
- Fitness and garden trails
- Swimming pools / spas
- Multi-purpose sport courts and fields
- Other potential retreat and low-intensity recreational uses within the existing open space areas of the property

The following implementing actions and approvals will include:

- **Specific Plan (SP):** The SP will cover approximately 191-acres of the existing 230-acre estate property, and will provide a comprehensive set of development guidelines, allowable uses, and development standards.
- **Development Agreement (DA)**: The DA will accompany the SP and establish special terms beneficial and mutually agreeable to both the City and the property owner to facilitate project development and to vest the project approvals.
- **General Plan Zoning Map Amendment (GPZMA)**: The GPZMA will amend the General Plan land use designation and zoning from R-L-2 and OS-PV to "Specific Plan", with an underlaying zoning designation of Resort Hotel (Rs-H).
- **Development Plan Permit**: The Development Plan Permit will ensure that project architecture, landscape, and site design have been reviewed by the Architectural Review Board (ARB), Planning Commission and City Council, and are consistent with the SP.
- **Lot Line Adjustment**: A lot line adjustment will be processed to create a single legal parcel for the 191-acre Specific Plan property, as well as separate legal parcels for the mountainous lands that are being excluded from the Specific Plan to ensure consistency with the CVMSHCP and Measure "V."

The approval of the Porcupine Creek Retreat Specific Plan will allow the proposed Estate/Retreat and Flood Control Channel uses. The uses allowed within each land use category will be further defined through implementing entitlement approvals as outlined above. Per the Conceptual Land Use Map, the Estate/Retreat use covers the existing estate compound as well as all proposed enhancements for buildout of the Retreat. Manmade improvements, such as buildings, driveways, parking areas, golf course fairways, recreational facilities, pools, pathways, utilities as well as other supporting site, building and landscape improvements, have been entirely developed on the property. Retreat enhancements will be designed and integrated in a manner compatible with the existing estate compound. Allowable uses for the estate/retreat include but are not limited to the following:

- Hotel facilities

- Guest rooms
- Villas and casitas
- Estate residence
- Health and fitness facilities, indoor and outdoor
- Spa services
- Restaurants, lounges, and catered food service including remote pop-up service, indoor and outdoor
- Meeting facilities
- Entertainment activities for retreat guests
- Recreational uses and open space

Additional allowable uses on the project property includes:

- Maintenance and back of house facilities
- Solar fields, battery storage and related facilities
- Parking including covered and enclosed
- Accessory structures including entry features, gatehouses, covered patios, decks, gazebos, sculptures, landscape/garden structures, greenhouses

The building area of the entire project, assuming total maximum buildout, would include approximately 180,000 square feet of retreat and villa structures, and approximately 70,000 square feet of temporary, accessory, and shade structures, for a total area of 250,000 square feet. The Specific Plan outlines the allowable uses and development standards for each proposed land use consistent with the Rancho Mirage General Plan. The maximum structure height (including sculptures/landscape structures) allowed onsite is 50 feet, or 2 stories. Building setbacks to perimeter properties is 50 feet for the front, side, and rear yards. Maximum structure (non-habitable) height in the 250-foot buffer area is permitted to be 20 feet.

The Flood Control Channel use is located along the western property boundary and contains facilities associated with the CVWD flood control channel including a concrete flood channel, fencing, access road, and storage/maintenance buildings. The flood channel and maintenance road serve as a physical barrier between the Estate/ Retreat and the natural desert/hillside areas to the northwest.

Signage on the project site will be limited to directional purposes and will be discreet. Signage that is not visible outside the property will be subject to administrative approval by the Director of Development Services. Signage that is visible from outside the project will be subject to review according to the provisions of Section 17.28.040, Signs, of the Rancho Mirage Municipal Code or as provided in the Development Agreement.

Vehicular access to the property currently occurs at a primary gated entry at the center of the eastern boundary of the site, at Dunes View Road, with a secondary entrance to the north at Mirage Road. The

Dunes View Road entrance is both manned and gated and is intended for use by the owner and guests. Emergency, maintenance, and special purpose access will be maintained at the southeast corner of the project site at the western terminus of Magnesia Falls Drive. Pedestrian circulation is provided within the project's low-speed, low volume private streets and golf cart paths as is common in desert resorts.

## Project Impacts

### *b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating and environmental effect*

The Porcupine Creek Retreat Specific Plan proposes the redevelopment of the property from a private estate to an exclusive retreat. The proposed additions could expand the total building area on the property from 66,500 square feet to approximately 250,000 square feet. The improvements are proposed to occur within the 191-acre Porcupine Creek Retreat Specific Plan property.

#### *Rancho Mirage General Plan Analysis*

The City of Rancho Mirage utilizes a single map to illustrate the General Plan land use and zoning. Density and intensity standards are consistent in both the General Plan and Zoning Code. As previously stated, the project currently operates as a private estate with recreational amenities. The General Plan and Zoning designation for the property is presently classified as Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage Channels (OS-W), and Mountain Reserve (MR).

According to the Rancho Mirage General Plan, Very Low Density Residential provides for single family residential development typically on individual lots of about 0.5-acre. Planned residential developments are also on appropriate form under this designation. Lands with this designation may serve to buffer more dense residential development from estate residential and open space uses, and allow 0 to 2 dwelling units per acre. Private Open Space is assigned to golf courses, lakes and water features, tennis courts, and other recreational facilities and landscaping that occur in Planned Residential Developments (PRD). The Floodways and Drainage Channels designation is assigned to natural or manmade floodways and drainage channels. Mountain Reserve designations are assigned to public lands or property subject to conservation easements in the Santa Rosa Mountains. Uses are limited to recreational activities, such as hiking or equestrian and non-motorized bike trails and facilities consistent with the need to protect sensitive biological resources. Vehicular access is not permitted in this designation.

As outlined in 4.10.2, *Existing Conditions* of this Land Use and Planning Section, project entitlements include a General Plan Zoning Map Amendment. The approval of these entitlements will amend the General Plan land use and zoning designations from the existing land uses of R-L-2, OS-PV, OS-W, and MR to "Specific Plan" with and underlaying designation of Resort Hotel (Rs-H). Within the Specific Plan land use designation, the project proposes two basic land uses: Estate/Retreat and Flood Control

Channel. The Flood Control Channel will include the West Magnesia Storm Channel at the northern property boundary and contains a concrete flood channel, fencing, access road, and storage and maintenance buildings. The East Magnesia Storm Channel is not delineated as it is contained within the existing/redeveloped golf course.

Specific Plans, according to the Rancho Mirage General Plan Land Use Element, provide detailed plans, concepts, and designs of large-scale or complex projects indicating the distribution, location, and intensity of proposed land uses. Specific Plans seek to generate development of exceptional quality through flexible planning and design. They can also permit uses, development standards, and density/intensity levels beyond those allowed in the City's Zoning Code. In return, Specific Plans require an applicant to demonstrate exceptional design quality and amenities, as well as a phased cost-effective extension of infrastructure. As proposed, the Porcupine Creek Retreat Specific Plan is consistent with the policies in the City's General Plan policies related to intent and use of specific plans.

A detailed analysis of the project's consistency with the policies of the various elements of the Rancho Mirage General Plan that are relevant to the project site are included in **Table 4.10.2, *City of Rancho Mirage General Plan Analysis***. The analysis contained in **Table 4.10.2** concludes that the project would remain consistent with the City's General Plan. Therefore, implementation of the project would not result in significant land use impacts due to inconsistency with the General Plan. Impacts would be less than significant.

### *Coachella Valley Multiple Species Habitat Conservation Plan Analysis*

The City of Rancho Mirage lies within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The CVMSCHP covers approximately 1.1 million acres in the Coachella Valley and ensures the conservation of the covered species and conserved natural communities in perpetuity. The Coachella Valley Conservation Commission (CVCC) oversees and manages the CVMSHCP and has adopted a development impact fee structure which helps fund and implement conservation efforts of the CVMSHCP. The Rancho Mirage Municipal Code Chapter 3.29.147, *CVMSHCP / Natural Community Conservation Plan local development mitigation fee*, enforces the impact fee which helps fund and implement conservation efforts of the CVMSHCP.

The Porcupine Creek Retreat project lies with the CVMSHCP area. The Plan normally requires a project proponent to pay a habitat replacement acquisition fee to the City of Rancho Mirage. Since the project is wholly confined to the existing golf course and estate lands, fees may not be required for the Specific Plan. In addition, the City is processing a Lot Line Adjustment to exclude all CVMSHCP Conservation Areas within the estate property from the Specific Plan area to ensure preservation. The project's fee requirements, if any, will be documented in the Project Development Agreement. For further discussion and mitigation, please consult **Section 4.3, *Biological Resources***, of this Draft EIR.

Additionally, the project site lies immediately adjacent to the Santa Rosa and San Jacinto Mountains Conservation Area of the CVMSHCP. To ensure consistency with the CVMSHCP and further protect the

Conservation Area located within and adjacent to the Specific Plan property, the City is processing a lot line adjustment to create a single legal parcel for the Specific Plan and facilitate the exclusion of all Conservation Area lands from the Specific Plan. The Plan stipulates land-use practices for projects within and adjacent to established Conservations Areas, which are provided in the Appendix of the project-specific Biological Report.

With the implementation of the mitigation provided in **Section 4.3, *Biological Resources***, the project would not conflict with the CVMSHCP and impacts would be less than significant.

**Table 4.10.2 City of Rancho Mirage General Plan Analysis**

| Relevant General Plan Policies | Specific Plan Consistency |
|---|---|
| **Land Use Element** | |
| ***Goal Land Use (LU) 1:*** *A resort residential community of desirable neighborhoods, a variety of community facilities, and high-quality development.*<br>***Goal LU 2:*** *A balanced mix of functionally integrated land uses, meeting the general social and economic needs of the community through simplified, compatible, and consistent land use and zoning designations.* | |
| **Policy LU 2.1:** Specific Plans shall be required, where appropriate, to ensure new development achieves high-quality building, design, and development standards and provides amenities above those expected in conventional development. | The Porcupine Creek Retreat Specific Plan was established to guide future development and land use within the Specific Plan boundary. The Specific Plan establishes site-specific development standards, land use regulations, and programs that guide the development of the property in a manner that is consistent with the Rancho Mirage General Plan, while also maintaining flexibility to respond to changing conditions that factor in any long-term development. The Specific Plan requires public hearing before the Planning Commission and the City Council. The Specific Plan incorporates the already established high design standards at the existing estate. |
| **Policy LU 2.2:** Specific plans shall be utilized, where appropriate, to assure the phased, logical and cost-effective extension of infrastructure and build-out of new development. | The Specific Plan implements all applicable elements of the General Plan and includes detailed information about the site's master plan and infrastructure improvements such as circulation, water, sewer, grading and drainage design. Much of the needed infrastructure for Specific Plan expansion is already on the existing site. |
| **Policy LU 2.3:** Specific Plans shall be updated periodically to reflect existing land use conditions, to modernize land use trends, to review boundaries, and to ensure that the long-term goals of the General Plan are being met through implementation of said specific plans. | The Porcupine Creek Retreat Specific Plan establishes site specific development standards, land use regulations, and programs to guide the development of the property in a manner that is consistent with the Rancho Mirage General Plan while also maintaining flexibility to respond to changing conditions that factor in any long-term development. |
| **Policy LU 2.6:** The City shall ensure privacy and safety for residential neighborhoods by providing adequate buffering and screening, particularly where neighborhoods adjoin or are integrated with commercial developments. | The existing Porcupine Creek property is surrounded by tall hedges and landscaping to create a buffer and screening, particularly with the adjoining neighborhoods to ensure privacy and safety of the site. The Specific Plan also includes the following setback requirements to further ensure adequate screening and buffering: habitable structures must be set back 250 feet from the adjacent residences, and non-habitable buildings (such as one-story golf maintenance and |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | storage buildings) must be set back at least 50 feet (See Table 3.1 in Specific Plan). |
| ***Goal LU 6:*** *The conservation of open space areas that protect environmental resources, guard against environmental hazards, and provide recreational opportunities, and enhance the aesthetic character of Rancho Mirage.*<br>***Goal LU 7:*** *A land use pattern that preserves Rancho Mirage's resort residential atmosphere, including scenic resources such as hillside and mountain vistas, waterways, and native desert communities.* | |
| **Policy LU 7.1:** The City shall protect and identify lands suitable and appropriated for preservation as open space areas. | The project site lies adjacent to the Santa Rosa Mountains, which is designated as Mountain Reserve (MR) in the City General Plan and lies within the San Jacinto and Santa Rosa Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The project site lies outside of the protected mountainous lands in the adjacent CVMSHCP Conservation Area/Measure "V" protected area. The portion of the current Porcupine Creek estate property situated within these mountainous lands is being separated from the Specific Plan area through a lot line adjustment being processed by the City to ensure preservation of these areas as open space. |
| **Circulation** | |
| ***Goal Circulation (CIR) 1:*** *A safe, efficient, attractive, and economical circulation network meeting current and future demands in a manner consistent with the resort residential character of the community.* | |
| **Policy CIR 1.2:** A detailed traffic analysis shall be required for development proposals or other activities that might potentially require roadway improvements above and beyond those evaluated in the Circulation Element and General Plan EIR and EIR Addendum. | A project-specific traffic analysis has been completed for the proposed project and incorporated into this EIR. However, the site is currently developed and roadway improvements above and beyond those evaluated in the City's planning documents are not anticipated to occur. Improvements including fire and emergency access would occur onsite, as required by the Riverside County Fire Department. These improvements include fire apparatus access, which must be engineered to support emergency response apparatus, as required by the Riverside County Fire Department, and would not require roadway improvements that exceed the improvements evaluated in the City planning documents. |
| **Conservation** | |
| ***Goal Conservation (COS) 2:*** *Trails for recreational use in the Santa Rosa Mountains that allow City residents and visitors to experience the desert environment and that preserve the mountains and associated sensitive plants and animals in their natural state.* | |

| Relevant General Plan Policies | Specific Plan Consistency |
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| **Policy COS 2.7:** Lands designated for Mountain Reserve (MR) shall be accessible for hiking, equestrian, and non-motorized biking trails, if sensitive biological resources are protected. | The project site lies outside of the protected mountainous lands in the adjacent CVMSHCP Conservation Area/Measure "V" protected area. The portion of the current Porcupine Creek estate property situated within these mountainous lands is being separated from the Specific Plan area through a lot line adjustment being processed by the City to ensure preservation of these areas as open space. The Specific Plan project will not alter the accessibility of these Mountain Reserve lands for hiking and recreational activities. Sensitive biological resources would continue to be protected, as discussed in **Section 4.3, *Biological Resources*** and **Section 4.10, *Land Use and Planning*** of this Draft EIR. |
| **Policy COS 2.8:** Trails shall not encroach upon bighorn sheep lambing areas and shall be designated to minimize impacts to sensitive biological resources. | Per the project-specific Biological Report, individuals of the endangered Peninsular population of bighorn sheep occur on the rocky hillsides adjacent to Porcupine Creek estate and observations of sheep and their sign were recorded several times in the 150-yard-wide buffer area outside the estate. However, the permanent bighorn sheep fencing that surrounds the property has been in place for nearly twenty years, and prevents bighorn from entering any part of the existing estate and the proposed project area. The fencing will continue to be maintained as part of the proposed project. Further discussion is provided in **Section 4.3, *Biological Resources*** of this Draft EIR. |
| ***Goal COS 3:*** *The protection and preservation of biological resources in Rancho Mirage, especially sensitive and special status wildlife species and their natural habitats.* | |
| **Policy COS 3.1:** The City shall support and participate in local and regional efforts to evaluate and protect natural habitats, including suitable habitats for rare and endangered species occurring in Rancho Mirage and vicinity. | A project-specific Biological Report was conducted to ascertain the impacts of the new modification of the Porcupine Creek estate on plant and animal resources of the project site and immediate vicinity. The Biological Report provided required and recommended mitigation for the project to ensure impacts to plant and animal resources are reduced to less than significant. See **Section 4.3**, ***Biological Resources***, for further discussion and mitigation. |
| ***Goal COS 4:*** *The conservation, efficient use, and thoughtful management of energy sources and mineral deposits.*<br>***Goal COS 5:*** *The long-term viability of limited and non-renewable resources.* | |
| **Policy COS 5.1:** The City shall promote energy efficiency and conservation in all areas of community development, including | Energy efficient and sustainable design features would be incorporated into the project. The implementation of the proposed |

| Relevant General Plan Policies | Specific Plan Consistency |
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| transportation, development planning, and public and private sector construction and operation, as well as in the full range of residential and non-residential projects. | design features will include facilitating solar energy generation and storage, as well as the use of electric vehicles onsite, thus reducing the use of automobiles on the project property. Energy efficient uses are outlined further in **Section 4.5, *Energy Resources***, of this Draft EIR. |
| ***Goal COS 7:*** *An informed public that respects Rancho Mirage's finite water resource and maximizes protection and conservation efforts for the benefit of the entire community.* | |
| **Policy COS 7.5:** Require new developments to establish and confirm the ability to meet current and future water resource demands. | Although the proposed Specific Plan project is a repurposing of an existing private estate and golf course, rather than a new development project, the availability and adequacy of water resources to meet the projected increase in water demand will be confirmed with CVWD. |
| ***Goal COS 8:*** *The preservation, maintenance, continuity, and enhancement of cultural heritage and resources in Rancho Mirage, including historic and prehistoric sites, objects, landscapes, and structures.* | |
| **Policy COS 8.1:** The City shall exercise its responsibility to preserve archaeological, historical, and cultural sites. | A project-specific Cultural Resources Report was conducted to determine the potential existence of archaeological, historical, or cultural resources that may exist on the project property. The site is currently developed and operates as a private estate and golf course, however, the project will be required to implement any mitigation measures identified in that Cultural Resources Report. See **Section 4.4, *Cultural Resources***, of this Draft EIR for further discussion. |
| **Policy COS 8.2:** Development or land use proposals that have the potential to disturb or destroy sensitive cultural resources shall be evaluated by a qualified professional and appropriate mitigation measures shall be incorporated into project approvals, if necessary. | A project-specific Cultural Resources Report was conducted to determine the potential existence of archaeological, historical, or cultural resources that may exist on the project property. The site is currently developed and operates as a private estate and golf course, however, the project will be required to implement any mitigation measures identified in that Cultural Resources Report. See **Section 4.4, *Cultural Resources***, of this Draft EIR for further discussion. |
| **Policy COS 8.3:** The City shall ensure the protection of sensitive archaeological and historic resources from vandalism and illegal collection. | A project-specific Cultural Resources Report was conducted, and the Porcupine Creek property was examined for significant cultural resources. The site is currently developed and operates as a private estate and golf course however, the project will be required to implement any mitigation measures identified in that Cultural Resources Report. Findings of the Cultural Resources Report are discussed in **Section 4.4, *Cultural Resources*** of this Draft EIR. |

| Relevant General Plan Policies | Specific Plan Consistency |
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| **Air Quality** | |
| ***Goal Air Quality (AQ) 1:*** *Preservation and enhancement of regional air quality for the protection of health and welfare of the community as a whole.* | |
| **Policy AQ 1.1:** The City shall coordinate and cooperate with CVAG and SCAQMD in the ongoing monitoring and management of major pollutants affecting Rancho Mirage and the region, with particular focus on PM10. | The Porcupine Creek estate is currently developed as a private residence with golf course and recreational facilities. Since 2011, the site has undergone various developmental changes including the addition of villas. Local Air Quality Management Plan (PM10 Plans) have been submitted and approved by the City of Rancho Mirage. The most recent grading permit approved for the property by the City of Rancho Mirage is Permit No. E1900189. The submittal and approval of Local Air Quality Management Plans for construction activities on the property will be required by the City prior to the start of grading and construction. |
| **Policy AQ 1.5:** The City shall review all development proposals for potential adverse effects on air quality and require mitigation of any significant impacts. | An Air Quality Analysis using the CalEEMod model will be utilized in this Draft EIR to determine the potential impact of air pollution created by the project property. Project impacts to air quality were determined to be less than significant since the project proposes a modest expansion of the existing improvements to repurpose the property into an exclusive, low-intensity retreat that will not increase air pollution to significant levels. See **Section 4.2, *Air Quality*** of this Draft EIR for further evaluation of the Air Quality Analysis and potential mitigation. |
| **Noise** | |
| ***Goal Noise (N) 1:*** *A noise environment providing peace and quiet that complements and is consistent with Rancho Mirage's resort residential character.* | |
| **Policy N 1.2:** Expand the City's Noise Ordinance to include noise exposure thresholds triggering project specific noise impact studies. Provide development standards and project design guidelines that include a variety of mitigation measures that can be applied to meet City Standards. | A project-specific Noise Analysis was conducted to determine the potential noise impacts created by the proposed retreat property, which found that the project will not have significant noise impacts or violate City noise standards. More detailed findings of the Noise Analysis are discussed in **Section 4.11, *Noise*** of this Draft EIR. |
| **Policy N 1.3:** Noise sensitive land uses, including residences, resorts, community open space, schools, libraries, churches, hospitals, and convalescent homes, shall be protected from high noise levels emitted by both existing and future noise sources. | Construction of the proposed retreat would occur during City designated construction hours to ensure the least amount of noise disturbance to sensitive receptors. Operation of the retreat would |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | not, by nature of the facility, create noise levels that would disturb noise sensitive land uses. |
| **Program N 1.2 A:** On a project-specific basis, apply noise mitigating site planning and require the installation of sound walls, earthen berms, wall and window noise insulations, and/or other mitigation measures in areas exceeding the City's normally acceptable noise levels. | Noise mitigating site planning, and the implementation of earthen berms, as well as wall and window noise insulations would occur onsite to ensure decreased noise levels. See **Section 4.11, *Noise*** for further analysis. |
| **Safety** | |
| ***Goal Safety (SAFE) 1:*** *A community that plans for and is protected from the effects of seismic and geologic hazards.* | |
| **Policy SAFE 1.2:** The City shall establish ordinances and guidelines to reduce the hazards from wind-blown sand and dust. | Submittal, approval, and implementation of the project-specific Local Air Quality Management Plan (LAQMP) would ensure hazards from windblown sand are mitigated during project construction. The LAQMP implements best management practices (BMPs), such as watering the site, during construction activities. Operation of the proposed project would include stabilized surfaces, such as asphalt, paved, developed, and landscaped surfaces to ensure dust created from the project is mitigated. |
| **Policy SAFE 1.9:** Where appropriate, hazard zones (earthquake fault lines, floodways and floodplains, steep or unstable slopes, etc.) shall be designed as open space, and incorporated into the General Plan land use map. | The southern portion of the existing estate property is occupied by the slopes of the Santa Rosa Mountains, and has been excluded from the Specific Plan area. Per the City's General Plan Land Use Map, this portion of the existing estate property is designated as Mountain Reserve. |
| ***Goal SAFE 2:*** *Protection of lives, property, and essential facilities from flooding and other hydrologic hazards in Rancho Mirage.* | |
| **Policy SAFE 2.3:** The City shall provide direction and guidelines for the development of onsite stormwater retention/detention facilities consistent with local and regional drainage plans and community design standards. | The project property is currently developed with existing onsite stormwater retention facilities located throughout the site. The facilities include the multiple water features (approximately 5.92 acres) throughout the site and retention areas throughout the golf course. Consult **Section 4.9, *Hydrology and Water Quality***, for an in-depth discussion of onsite retention areas. |
| **Program SAFE 2.3A:** Establish and enforce regulations and guidelines for the development and maintenance of project-specific onsite retention/detention basins that implement the NPDES program, enhance groundwater recharge, complement regional flood control facilities, and address applicable community design policies. | Development of the proposed project may include the implementation of a Stormwater Pollution Protection Plan (SWPPP) if the project falls within the California Construction General Permit (SWRCB Orders No. 2009-009-DWQ as amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ) requirements. The SWPPP |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | establishes best management practices (BMPs) during the construction phases of the project to protect local storm water.<br>Flood control facilities that currently exist onsite will continue to serve the proposed project to the appropriate capacity. |
| **Policy SAFE 2.7:** Development proposals located in areas that are subject to flooding shall be evaluated to minimize the exposure of life and property to potential flood risks. All development proposed on lands of one acre or larger shall be designed such that all stormwater to the level of a 100-year frequency storm, worst case of the 3, 6, 12 or 24-hour duration, shall be retained onsite. | Project drainage is intended to utilize existing drainage features and infrastructure. A series of lakes, low points, and retention areas throughout the project site are designed to capture surface runoff from the 100-year storm. |
| ***Goal SAFE 3:*** *Protection of the lives and property of residents, business owners, and visitors from structural and wildland fires.*<br>***Goal SAFE 4:*** *Emergency preparedness and response programs that provide for fast effective response to daily emergencies and major catastrophes.* | |
| **Policy SAFE 4.1:** The City shall minimize the exposure of residents, business owners, and visitors to the impacts of structural and wildland fires. | Any new development or redevelopment would be required to comply with minimum standards for materials and material assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in wildland-urban interface areas as required by the California Fire Code. Additionally, the Rancho Mirage General Plan states that the City shall conduct long-range fire safety planning, including enforcement of stringent building, fire, subdivision and other Municipal Code Standards, improved infrastructure, and mutual aid agreements with other public agencies and the private sector. |
| **Program SAFE 4.1A:** Maintain a weed abatement program to ensure clearing of dry brush areas. | The project property's landscape is maintained and includes a golf course that is irrigated regularly. Additionally, the Santa Rosa Mountains are steep and rocky and do not provide an environment conducive to the growth of dense vegetation, or dry brush. |
| **Policy SAFE 4.2:** The City shall conduct long-range fire safety planning including enforcement of stringent building, fire, subdivision and other Municipal Code standards, improved infrastructure, and mutual aid agreements with other public agencies and the private sector. | The City contracts with the Riverside County Fire Department (RCFD) for fire services. The Fire Department Planning Requirements letter, dated June 8, 2020, requires the project property to develop emergency vehicle apparatus access roads. Locations and design of these roads shall be in accordance with the California Fire Code, City of Rancho Mirage Municipal Code, and RCFD Standards. Additionally, any new development or redevelopment would be required to comply with minimum standards for materials and material |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in wildland-urban interface areas as required by the California Fire Code. Per the June 2020 letter, the project proponents/developers will be expected to provide for a proportional mitigation to impacts to potentially increased need for fire services via capital improvements and/or impact fees. |
| **Program SAFE 4.2A:** Require property adjacent to Very High Threat Zones to comply with Riverside County Fire Department Wildfire Safety Recommendations for fuel modification plans and defensible space. | The project property's landscape is maintained and includes a golf course that is irrigated regularly. This maintained landscaped area acts as defensible space for the project property. |
| **Program SAFE 4.2B:** Evaluate the adequacy of access routes to and from hazard areas relative to the degree of development or use (e.g., road width, road type, length of dead-end roads, etc.). | The City contracts with the Riverside County Fire Department (RCFD) for fire services. The Fire Department Planning Requirements, in a letter dated June 8, 2020, requires the project property to develop emergency vehicle apparatus access roads. Locations and design of these roads shall be in accordance with the California Fire Code, City of Rancho Mirage Municipal Code, and RCFD Standards. |
| ***Goal SAFE 6:*** *Maintenance of Rancho Mirage as a safe place with high-quality of life for its residents, businesses, and visitors in the face of climate change.* | |
| **Program SAFE 6.2B:** Improve wildfire prevention through regulations of new development, establish and/or maintain cooperative fire agreements, and increase vegetation management efforts to reduce wildfire potential. | The proposed project, as required by the Riverside County Fire Department (RCFD), will develop emergency vehicle apparatus access roads in accordance with the California Fire Code, City of Rancho Mirage Municipal Code, and RCFD Standards. Plans must be submitted to the Fire Department for review and approval prior to building permit issuance. Vegetation management efforts at the project property currently consist of the constant maintenance of landscaped areas, including the golf course, landscaped berms, and landscaped building frontages and pathways. The maintenance of these landscaped areas create defensible space between the habitable structures and the natural mountainous landscape north, west, and south of the project property reducing wildfire potential at the site. |
| **Public Services and Facilities** | |
| ***Goal Public Service and Facilities (PS&F) 1:*** *Water, sewer and utility facilities that safely and adequately meet the needs of Rancho Mirage at buildout.*<br>***Goal PS&F 6:*** *A high level of police and fire protection and paramedic service.* | |

| Relevant General Plan Policies | Specific Plan Consistency |
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| ***Goal PS&F 9:*** *A coordinated, responsive, and effective emergency preparedness disaster implementation plan and a high degree of readiness to respond to disastrous events.* | |
| **Policy PS&F 6.1:** Review of all new and improved developments for their impact on safety and the provision of police and fire protection services. | Per a letter from the Riverside County Fire Department (RCFD), dated June 8, 2020, the proposed project may have a cumulative adverse impact on the fire department's ability to provide an acceptable level of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, traffic, and population. Therefore, the RCFD expects the project proponents/developers to provide for a proportional mitigation to these impacts via capital improvements and/or impact fees. |
| **Policy P&F 6.2:** Enforce fire standards and regulations in the course of reviewing building plans and conducting building inspections. | Proposed project buildings, access roads, emergency vehicle apparatus access roads shall be in accordance with the California Fire Code, City of Rancho Mirage Municipal Code, and Riverside County Fire Department Standards. Plans must be submitted to the Fire Department for review and approval prior to building permit issuance. |
| **Policy PS&F 6.4:** Due to the fire hazard potential of hilly areas with slopes of ten percent or greater, access problems, lack of water or sufficient pressure, and excessively dry brush, specify special onsite fire protection measures during project review. | The Porcupine Creek property is located adjacent to the Santa Rosa Mountains. The proposed project is expected to provide for a proportional mitigation via capital improvements and/or impact fees to mitigate potential impacts regarding fire services. Improvements include providing emergency vehicle apparatus access roads, commonly referred to as fire lanes, throughout the property to support emergency response apparatus. Specific criteria pertaining to the design of the fire apparatus access roadways are detailed in a letter by the Riverside County Fire Department, dated June 8, 2020.<br>Fire Department water system(s) for fire protection shall be in accordance with the California Fire Code, City of Rancho Mirage Municipal Code, and Riverside County Fire Department Standards. Plans must be submitted to the Fire Department for review and approval prior to building permit issuance. |
| **Policy PS&F 7.3:** Preserve and protect existing and future school sites, to the greatest extent practical, from excessive noise and traffic conditions and ensure compatible surrounding land uses. | The Porcupine Creek property is located south of Rancho Mirage Elementary School. Presently, the property operates as a private estate, allowing access to the owner and guests at the eastern property boundary at Dunes View Road. Construction, employee, and delivery access to the site occurs at the northern corner of the |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | property, at Mirage Road. During construction of the proposed project, construction access would continue to occur on the Mirage Road entrance. The entrance to Rancho Mirage Elementary School, occurs at Indian Trail. Additionally, construction activities would occur during City mandated hours. A Construction Traffic Control Plan will be prepared.<br>Operation of the proposed retreat is not anticipated to generate noise levels incompatible to the surrounding land uses. Additionally, traffic generated by the proposed property is anticipated to be minimal since guests who arrive at the retreat are anticipated to stay at the retreat for between several nights and a full week, and are not expected to leave the property grounds during their stay on a frequent basis, if at all. A Noise Analysis and Traffic Analysis was conducted for the Porcupine Creek Retreat Specific Plan project and are discussed in further detail in **Section 4.11, *Noise***, and **Section 4.13, *Transportation,*** respectively. |
| **Community Design** | |
| ***Goal Community Design (CD) 1:*** *Preservation and promotion of the special identity of Rancho Mirage as an "Oasis in the Desert," combining quality development with scenic, natural, and open space amenities.* | |
| **Policy CD 1.2:** Unique views of mountains and other natural open spaces from Rancho Mirage's streets shall be preserved and enhanced. | The project property, which is currently developed and operates as a private estate, is located adjacent to the slopes of the Santa Rosa Mountains. The view of the Santa Rosa Mountains depends on the location of the perspective viewer. Depending on this location, the views of the Santa Rosa Mountains may be obstructed by manmade facilities, structures, and landscaping. The Porcupine Creek property is surrounded by existing perimeter landscaping. The project proposes the development of manmade structures; however, the building setbacks and locations of the proposed structures will not obstruct the existing views of the Santa Rosa Mountains. |
| ***Goal CD 4:*** *A landscape program that promotes aesthetics, climate change resistance, and place-making.* | |
| **Policy CD 4.1:** Landscape plans submitted to the City shall be consistent with this element. | The Porcupine Creek property is currently landscaped. This includes the project perimeter as well as throughout the project site. Landscaping along the property's perimeter includes tall/mature trees, hedges, and ground coverings to screen and provide privacy for the private estate. The proposed Preliminary Development Plan (PDP) |

| Relevant General Plan Policies | Specific Plan Consistency |
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| | that will be submitted as part of project entitlements will demonstrate the design guidelines required by the Specific Plan and ensure quality architecture, landscape, and site design to City standards. |
| **Program CD 4.1A:** Require the use of a wide variety of regionally appropriate plant materials. | The architecture, landscaping, and site design proposed by the project would be provided in the Preliminary Development Plan (PDP), which would be reviewed by the City of Rancho Mirage. |
| ***Goal CD 5:*** *Walls and fences that act as attractive elements of the streetscape, while providing privacy and views, creative design, and visual continuity.* | |
| **Policy CD 5.1:** Wall and fence designs shall be considered important components of the design review process and overall streetscape improvement plans. | The project property is currently separated from the surrounding uses by walls and landscaped areas. Changes to the property's frontage are not proposed as a part of the Porcupine Creek Retreat Specific Plan project. |
| ***Goal CD 6:*** *Signage of the highest level of design and construction quality.* | |
| **Policy CD 6:** The City shall encourage high-quality, low-scale signage that effectively communicates in an attractive manner. | The extensive use of signage at the Porcupine Creek property is not anticipated. Any on-site directional signage will be discreet. Signage that is not visible outside of the property will be subject to administrative approval by the Director of Development Services. Signage that is visible from outside the project will be subject to reviewing according to the provisions of Section 17.28.040, Sign Permit Review, of the Rancho Mirage Municipal Code. |
| ***Goal CD 7:*** *Protection of the star-studded desert night sky from excessive glare.* | |
| **Policy CD 7.1:** Lighting features that preserve the beauty of the desert night while still performing directional, safety, and informational functions shall be designed and incorporated into development projects. | The project will provide various forms of lighting to adequately illuminate the parking areas, entrances, signage, walkways, and other project features for security purposes. |
| **Program CD 7.1A:** Use low-scale, accent, and back lighting to highlight key entry points, signage, enhanced intersections, and feature landscaping. | The project's lighting is expected to continue to implement low intensity nighttime illumination to highlight elements of the project and contribute to an enhanced streetscape setting. The project will provide various forms of lighting to adequately illuminate the parking areas, entrances, signage, walkways, and other project features for security purposes. All lighting shall comply with Municipal Code standards. |

| Relevant General Plan Policies | Specific Plan Consistency |
|---|---|
| ***Goal CD 8:*** *Architecture that is sensitive to its context, blending quality materials, distinctive detailing, and a strong sense of living with nature.* | |
| **Policy CD 8.1:** The City shall encourage cohesive yet flexible architectural design for all structures in Rancho Mirage. | The Porcupine Creek Retreat Specific Plan was established to guide future development within the SP area by outlining site specific development standards, land use regulations, and programs. This is intended to guide development of the property in a manner that is consistent with the Rancho Mirage General Plan while maintaining flexibility to respond to changing conditions that factor in any long-term development. The site currently includes building structures. Additional structures will be similar in architecture and design to ensure continuity and cohesiveness on the property. |
| **Program CD 8.1A:** Write architectural and site design guidelines that feature best practices in the Coachella Valley area and include:<br>- A menu of architectural styles and elements<br>- Warm, natural desert color palettes<br>- Quality materials and surface texture<br>- Low profile roof types and designs<br>- Ancillary features such as patios, arcades, courtyards and other outdoor features. | The overall architectural aesthetic of the Porcupine Creek Retreat Specific Plan is modern, minimalist detailing using traditional, Mediterranean-inspired materials to portray a serene, upscale resort environment complimentary of the surrounding local desert.<br>The retreat will incorporate natural materials and textures, subdued colors, and characteristic architectural elements that will be complimented by the lush landscape design. Large expanses of glazed doors will maximize natural light exposure and encourage interaction with the outdoors. Entry overhangs of varying scales will inform visitors of public versus private spaces, offer relief from the sun, and add interest to building facades.<br>Articulation in the facades using wall step backs and roof overhangs adds visual interests and variation to the differently programmed buildings. Architectural emphasis on spaces of outdoor amenities, such as wooden decks and trellises, help to blur the line between natural environment and built structures. The use of columns and trellises to grow plant coverings will join the landscaping with the built environment.<br>Materials and accessory structures used along the approach of the buildings will maintain a common, consistent architectural style within the retreat complex. Changes in material will be applied purposefully and, in a manner, corresponding to variations in the building mass and use. A balanced relationship between “hard” materials like stone cladding and clay tile and “soft” materials like |

| Relevant General Plan Policies | Specific Plan Consistency |
|---|---|
| | glazing and plant-adorned wood, all in subdued, natural desert tones will create a palette characteristic to the retreat complex. |
| ***Goal CD 11:*** *Parking areas that are screened from public streets to the greatest extent possible.* | |
| **Policy CD 11.1:** Parking shall be screened from roadways by encouraging landscaped medians, berms, trellises, grade changes, or placement behind buildings. | Parking on the project property would continue to occur at the western property boundary, east of the existing West Magnesia Storm Channel. Parking is separated visually from the center of the property by a landscaped berm. Parking is screened from public view by its location at the westernmost portion of the property. |
| **Arts and Culture** | |
| ***Goal Arts and Culture (A&C) 3:*** *Night sky protection* | |
| **Policy A&C 3.1:** The City shall review lighting details for development projects to ensure protection of the night sky. | The project's lighting is expected to continue to implement low intensity nighttime illumination to highlight elements of the project and contribute to an enhanced streetscape setting. The project will provide various forms of lighting to adequately illuminate the parking areas, entrances, signage, walkways, and other project features for security and safety purposes. In compliance with Chapter 17.18.050 of the Rancho Mirage Municipal Code, the proposed lighting must be situated to prevent emissions of glare or light beyond the property line. |
| **Policy A&C 3.2:** Development projects within one mile of the observatory shall be subject to additional lighting review and/or restrictions. | Design features of the proposed project will be submitted and reviewed by the City of Rancho Mirage to ensure compliance with City regulations. |

## 4.10.5 Cumulative Impacts

The proposed project would not divide an established community and is consistent with land use policies of the City's General Plan and the CVMSHCP. Development of the project, in conjunction with other cumulative development in the area permitted by the City's General Plan, would not result in citywide and regional land use and planning impacts. Upon adoption of the Porcupine Creek Retreat Specific Plan project, the project would be consistent with applicable goals and policies in the City's General Plan and Zoning Code.

As with the project, related projects and other future growth would be subject to compliance with the local and regional plans reviewed in this section. Cumulative impacts would be less than significant and would not have a considerable contribution to potential land use impacts.

## 4.10.6 Mitigation Measures

No mitigation measures are required.

## 4.10.7 Level of Significance After Mitigation

No significant impacts have been identified and no mitigation measures are necessary.

## 4.10.8 Resources

1. Coachella Valley Multiple Species Habitat Conservation Plan, Executive Summary, August 2016, http://www.cvmshcp.org/Plan%20Documents/07.%20CVAG%20MSHCP%20Plan%20Executive%20Summary.pdf, accessed June 2020.

# 4.11 Noise

## 4.11.1 Introduction

This section describes the existing acoustic setting at the project site and in the vicinity and evaluates the potential noise exposure that could result from build-out of the Porcupine Creek Retreat Specific Plan project. Information for this section was obtained from the *Porcupine Creek Retreat Noise Impact Study ("*Noise Impact Study*")*, prepared by MD Acoustics, LLC., August 2020 (**Appendix G**).

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with noise at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to noise in the Initial Study, the following does not require additional analysis in this Draft EIR.

*For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels:*

- The closest airport to the project site is the Palm Springs International Airport, located at 3400 East Tahquitz Canyon Way, approximately 6.25 miles from the Porcupine Creek property. The project site is located outside of the 70, 65, and 60 CNEL noise contours associated with the airport facility. Furthermore, the Palm Springs Airport Land Use Plan does not identify the project as being located within its planning area. Due to the project's distance from the Palm Springs Airport, the project site is not anticipated to expose people residing or working in the project area to excessive noise. No impacts are expected.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.11.2 Existing Conditions

### Project Location and Surrounding Land Uses

The approximately 191-acre proposed Porcupine Creek Retreat Specific Plan project lies with the 230-acre Porcupine Creek estate, in Rancho Mirage. Porcupine Creek currently operates as a private estate and residence, bounded by the Santa Rosa Mountains on the north, west, and south, the Rancho Mirage Elementary School to the north, and the Magnesia Falls Cove neighborhood to the east. The

Santa Rosa Mountain area, north, west and south of the property, lies within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Santa Rosa and San Jacinto Mountains Conservation Area. Therefore, this area is protected from intense development.

## Existing Project Operation

The Porcupine Creek estate property currently operates as a private estate with an existing 21,000-square-foot main residence in addition to four casitas and six clustered villas. The estate grounds also accommodate various private recreational amenities including a golf course, a tennis pavilion overlooking three tennis courts, a pool and spa area with private spa treatment rooms, a fitness center, restrooms, and poolside bar.

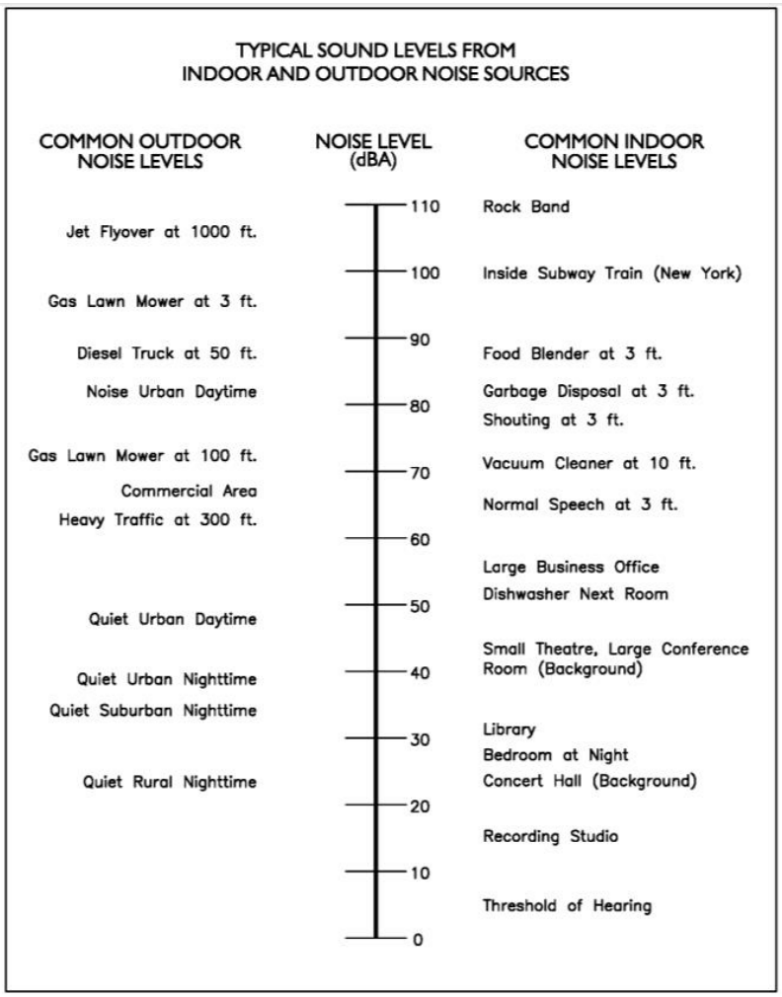
## Proposed Project Operation

The Porcupine Creek Retreat property proposes to operate up to 50 units, restaurant, dining deck, spa complex, retreat related facilities, and a rerouted 18-hole golf course.

## Noise Fundamentals

Noise is simply defined as "unwanted sound" that becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Where sound is the mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. **Table 4.11.1, *Typical A-Weighted Noise Levels,*** presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail.

**Table 4.11.1 Typical A-Weighted Noise Levels**




*Source: Porcupine Creek Retreat Noise Impact Study, Exhibit C, MD Acoustics, August 2020 (Appendix G)*

### *Frequency and Hertz*

A continuous sound is described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (i.e., bass sounding) and high-frequency sounds are high in pitch (i.e., squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch of 20 Hz to the high pitch of 20,000 Hz.

### *Sound Pressure Levels and Decibels*

The amplitude of sound determines its loudness, which increases or decreases simultaneously with the amplitude. Sound pressure amplitude is measured in units of micro-Newton per square inch meter (N/m2), also referred to as micro-Pascal (uPa). One micro-Pascal is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or Lp) is used

to describe the ratio of actual sound pressures to a reference pressure squared in logarithmic units. These units are called decibels (dB).

### *Addition of Decibels*

Due to the fact that decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by a simple addition or subtraction calculation. When two sounds (or equal SPL) are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

Since the range of intensities that the human ear can detect is so large, the logarithmic scale (based on multiples of 10) is frequently used to measure intensity. While the scale for measuring intensity is the decibel scale. Each interval of 10 decibels represents a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. As shown in **Table 4.11.1**, ***Typical A-Weighted Noise Levels,*** the most common sounds vary between 30 dBA (very quiet) to 100 dBA (very loud) with a normal conversation at three feet being roughly 60 dBA. By comparison, jet engine noises equate to 110 dBA at approximately 100 feet, can cause serious discomfort. Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

### *Human Response to Changes in Noise Levels*

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of the Noise Impact Study, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in noise level of 3 dB, whereas a change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. This is represented in **Table 4.11.2, *Changes in Noise Levels***, below. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling in volume of traffic on a highway) would result in a barely perceptible change in sound level.

**Table 4.11.2 Changes in Noise Levels**

| Changes in Intensity Level, dBA | Changes in Apparent Loudness |
|---|---|
| 1 | Not perceptible |
| 3 | Just perceptible |
| 5 | Clearly noticeable |
| 10 | Twice (or half) as loud |

*Source: Porcupine Creek Retreat Noise Impact Study, Exhibit C, MD Acoustics, August 2020 (Appendix G)*

### *Noise Descriptors*

Noise in our daily environment fluctuates over time, where some noise levels occur in regular patterns (constant), while others can be random or sporadic. Noise descriptors were created to describe the different time-varying noise levels. For reference purposes of this noise analysis, the noise descriptors are provided subsequently:

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighted filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgement of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m., and after the addition of ten (10) decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level.

Equivalent Sound Level (Leq): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period. Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels. The equivalent sound level represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the “average” noise levels within the environment.

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding enclosed spaces such as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

L(n): The A-weighted sound level exceeding during a certain percentage of the sample time. For example, L10 is the sound level exceeded 10 percent of the sample time (similarly L50, L90 and L99, etc. are also referred to as Percent Noise Levels.

Noise: Any unwanted sound or sound which is undesirable because it interferes with speech and hearing or is intense enough to damage hearing, or is otherwise annoying.

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc., associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not in this definition includes: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (i.e., school play yard areas).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

### *Traffic Noise Prediction*

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2-3 axle) and heavy truck percentage (4 axle and greater), and (4) sound propagation. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB since a doubling of sound energy results in a 3 dB increase in sound.

### *Sound Propagation*

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (a point source) radiates outward in a spherical pattern as it travels away from the source. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuations of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

### *Noise Control and Barriers*

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to these three elements.

### *Noise Barrier Attenuation*

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source.

### *Land Use Compatibility with Noise*

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a neighborhood or community, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The Federal Highway Administration (FHWA) encourages state and local government agencies to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized.

## Ground-Borne Vibration Fundamentals

### *Vibration Descriptors*

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude:

Peak Particle Velocity (PPV): PPV is the maximum instantaneous peak in vibration velocity, typically given in inches per second. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response because it takes some time for the body to respond to vibration signals.

Root Mean Squared (RMS): RMS can be used to denote vibration amplitude. The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body.

Vibration Level (VdB): VdB is commonly used to measure RMS and serves to reduce the range of numbers used to describe human response to vibration.

### *Vibration Perception*

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

There are three main types of vibration propagation: surface, compression, and shear waves. These types of vibration propagation are described below:

***Surface waves***, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water.

***Compression waves***, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves.

***Shear waves***, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithimic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

## 4.11.3 Regulatory Setting

### Federal

#### *Noise Control Act of 1972*

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

1. Publicize noise emission standards for interstate commerce;
2. Assist state and local abatement efforts; and
3. Promote noise education and research.

The Federal Office of Noise Abatement and Control (ONAC) originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated, leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows: The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies. The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system. The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

#### *National Institute for Occupational Safety and Health*

The National Institute for Occupational Safety and Health (NIOSH) prepared the Criteria for Recommended Standard: Occupational Noise Exposure which established a construction-related noise level threshold. A division of the U.S. Department of Health and Human Services, NOISH identifies a noise level threshold based on the duration of exposure to the source. The construction-

related threshold starts at 85 dBA for more than eight hours per day, and for every 3 dBA increase, the exposure time is cut in half. This results in noise level thresholds for 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day.

### *Occupational Safety and Health Administration*

The Occupational Safety and Health Administration (OSHA) requires hearing protection be provided by employers in workplaces where the noise levels may, over long periods of exposure to high noise levels, endanger the hearing of their employees. Standard 29 (Labor) of the Code of Federal Regulations (CFR), Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels.

## State

### *State of California Noise Requirements*

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which must be prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. The City of Rancho Mirage Noise Element is included in the City's General Plan. In addition, CEQA requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

### *California Department of Health Services Office of Noise Control*

The California Department of Health Services Office of Noise Control (ONC) was established in 1973 as an instrument to developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix". The matrix allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

### *State of California Building Standards*

The state's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60

dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

## Regional and Local

### *Coachella Valley Multiple Species Habitat Conservation Plan Final Recirculated Environmental Impact Report*

Section 4.9.5 of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Final Recirculated Environmental Impact Report (EIR) establishes a threshold of 75 dBA Leq to assess potential construction noise level impacts during construction near or adjacent to conservation areas.

### *Riverside County General Plan*

Since the City of Rancho Mirage does not identify specific construction vibration level standards, the County of Riverside General Plan Noise Element Policy N 16.3 vibration standards are used to analyze construction vibration. Policy N 16.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) over the range of one to 100 Hz. Therefore, the County of Riverside identifies a vibration perception threshold of 0.01 in/sec. For vibration levels expressed in velocity, the human body responds to the average vibration amplitude often described as the root-mean-square (RMS). The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a one-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to reduce the range of numbers used to describe human response to vibration. Therefore, the County of Riverside vibration standard of 0.01 in/sec in RMS velocity levels is used in this analysis to assess the human perception of vibration levels due to project-related construction activities.

### *Rancho Mirage General Plan*

Applicable policies and standards governing environmental noise in the City are set forth in the Rancho Mirage General Plan Noise Element. The City's Noise Element outlines the exterior noise standards for community noise environments, where single-family residential noise limits are normally acceptable up to 55 dBA CNEL and conditionally acceptable up to 70 dBA CNEL. Golf courses are normally acceptable up to 75 dBA CNEL. Additionally, the Rancho Mirage General Plan outlines goals, policies, programs to reduce potential noise impacts within the City. **Table 4.11.3*, Rancho Mirage Land Use Compatibility Noise Guidelines***, illustrates the CNEL noise levels compatible with particular land uses within the City.

**Table 4.11.3 Rancho Mirage Land Use Compatibility Noise Guidelines**

| Land Uses | CNEL | | | | | | |
|---|---|---|---|---|---|---|---|
| | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential, low density (single-family dwellings, duplex, + mobile homes) | A | B | | | C | D | |
| Residential – Multiple Family | A | | B | | C | D | |
| Transient Lodging: Hotels and Motels | A | | B | | C | | D |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | A | | B | | C | D | |
| Auditorium, Concert Halls, Amphitheaters | B | | | C | | | |
| Sports Arenas, Outdoor Spectator Sports | B | | | | C | | |
| Playgrounds, Neighborhood Parks | A | | | | C | D | |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | A | | | | C | | D |
| Office Building, Personal Business, Professional | A | | | | B | | D |
| Industrial, Manufacturing, Utilities, Agriculture | A | | | | B | | D |

A = NORMALLY ACCEPTABLE - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
B = CONDITIONALLY ACCEPTABLE - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
C = NORMALLY UNACCEPTABLE - New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
D = CLEARLY UNACCEPTABLE - New construction or development should generally not be undertaken.

*Source: City of Rancho Mirage Noise Element, Exhibit 20, Noise Level and Land Use Compatibility, 2017.*

### *Rancho Mirage Addendum to the General Plan Final Environmental Impact Report*

The Rancho Mirage Addendum to the Final General Plan Environmental Impact Report (EIR) states that the City regulates noise-generating activities through the Municipal Code. The Municipal Code permits construction noise between the hours of 7:00 a.m. to 7:00 p.m., if a building permit has been

issued. The Addendum to the Final EIR also provides policies and goals in order to mitigate noise impacts. Policy 1.1 assesses and mitigates noise impacts, while Policy 1.2 protects sensitive land uses from high noise levels. Per the Addendum to the Final EIR, the main contribution to operational noise is the addition of project-generated vehicles along site access roads. Other potential operational noise sources include noise from airways, trains/railways, and industrial complexes.

### *Rancho Mirage Municipal Code*

Chapter 8.45 of the City's Municipal Code outlines the City's noise ordinance. The applicable Sections within Chapter 8.45 are outlined below.

Section 8.45.030 Exterior Noise Limits: No person shall operate or cause to be operated any source or allow the creation of sound or noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level, as measured on any other property, to exceed:

A. The noise level for the applicable zone specified in **Table 4.11.4*, Allowable Exterior Noise Level***, for a cumulative period of more than thirty minutes in any hour of the applicable period.

**Table 4.11.4 Allowable Exterior Noise Level**

| Noise Zone | Time of Day | Noise Level dBA |
|---|---|---|
| Residential, Low Density | 7:00 a.m. to 6:00 p.m.<br>6:00 a.m. to 10:00 p.m.<br>10:00 p.m. to 7:00 a.m. | 55<br>50<br>45 |
| Residential, Medium and High Density, Hospital, Open Space | 7:00 a.m. to 6:00 p.m.<br>6:00 a.m. to 10:00 p.m.<br>10:00 p.m. to 7:00 a.m. | 60<br>55<br>50 |
| Commercial Office, Resort Commercial, Mixed Use, Institutional | 7:00 a.m. to 6:00 p.m.<br>6:00 a.m. to 10:00 p.m.<br>10:00 p.m. to 7:00 a.m. | 65<br>60<br>55 |
| Commercial Neighborhood, General Commercial, Commercial Recreation, Light Industrial | 7:00 a.m. to 6:00 p.m.<br>6:00 a.m. to 10:00 p.m.<br>10:00 p.m. to 7:00 a.m. | 70<br>65<br>60 |

*Source: Rancho Mirage Municipal Code, Section 8.45.030, Table A-1.*

B. For a cumulative periods of time less than thirty minutes in an hour, all the noise standards in **Table 4.11.4** (above) are increased according to **Table 4.11.5, *Allowable Exterior Noise Level Adjustment***.

**Table 4.11.5 Allowable Exterior Noise Level Adjustment**

| Duration of Sound | dBA Adjustment |
|---|---|
| 15 to 30 minutes per hour | +3 |
| 10 to 15 minutes per hour | +5 |
| 5 to 10 minutes per hour | +10 |
| 1 to 5 minutes per hour | +15 |
| Any period of time less than 1-minute per hour | +20 |

*Source: Rancho Mirage Municipal Code, Section 8.45.030, Table B-1.*

Section 8.45.050 Special Provisions: The following activities and noise sources shall be exempt from the provisions of this chapter:

> 8.45.050(E) – Special Provisions – construction, alteration, repair, grading or improvement of any building, structure, road or improvement to real property for which a permit has been issued by the City if said construction occurs within the allowable hours set forth in Section 15.04.030(A)(10).

Chapter 8.45.065 Landscape Maintenance: The following are applicable to the project site:

A. It is unlawful and a public nuisance for any person to permit or perform for-hire landscape and nonemergency exterior hardscape maintenance activities such as, but not limited to, tree trimming, re-seeding, lawn mowing, leaf blowing, dust and debris clearing, and any other landscaping or nonemergency exterior hardscape maintenance activities which utilize any motorized saw, sander, drill, grinder, leaf-blower, lawnmower, hedge trimmer, edger, or any other similar tool or device any time on Saturday or Sunday and between the hours of 6:00 p.m. and 7:00 a.m. the next day during weekdays, unless otherwise provided in this section.
B. The regular moving or grooming of golf courses, grass tennis courts, grass croquet courts, and lawn bowling areas shall be exempt from the restrictions set forth in this section. The allowed work hours for mowing or green preparation for golf courses, grass tennis courts, grass croquet courts, and lawn bowling areas shall be between 5:30 a.m. and 7:00 p.m., seven days per week and during all seasons of the year.
C. Nothing set forth in this section shall permit any person from engaging in any activities that exceed the exterior noise level limits set forth in Section 8.45.030 or otherwise constitute a public nuisance as set forth in Section 14.60.325 of the Municipal Code.

## 4.11.4 Project Impact Analysis

### Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generation of excessive ground-borne vibration or ground-borne noise levels?

c. For a project located within the vicinity of a private airstrip or an airport land use plan, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Threshold topic "c", involving public airports or public use airport, is not analyzed in great detail since screening criterion related to noise concluded that there would be no impacts.

## Methodology

Project-related noise impacts were analyzed in the Noise Impact Study, prepared by MD Acoustics in August 2020. The methodologies used in the Noise Impact Study are provided in this section.

### *Noise Measurement Procedure and Criteria*

In order to determine the existing noise level at the project site, MD Acoustics took noise measurements. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as first row of houses;
- Locations that are acoustically representative and equivalent of the area of concern;
- Human land usage; and
- Sites clear of major obstruction and contamination.

MD Acoustics conducted the sound level measurements in accordance to the City of Rancho Mirage standards, which are similar to CalTrans technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed 5 feet above the ground for all measurements.
- Sound level meters were calibrated (Larson Davis CAL 200) before and after each measurement.
- Following the calibration of equipment, a wind screen was placed over the microphone.
- Frequency weighting was set on "A" and slow response.
- Results of the long-term noise measurements were recorded on field data sheets.
- During any short-term noise measurements, any contaminations such as barking dogs, local traffic, lawn mowers, or aircraft fly-overs were noted.
- Temperature and sky conditions were observed and documented.

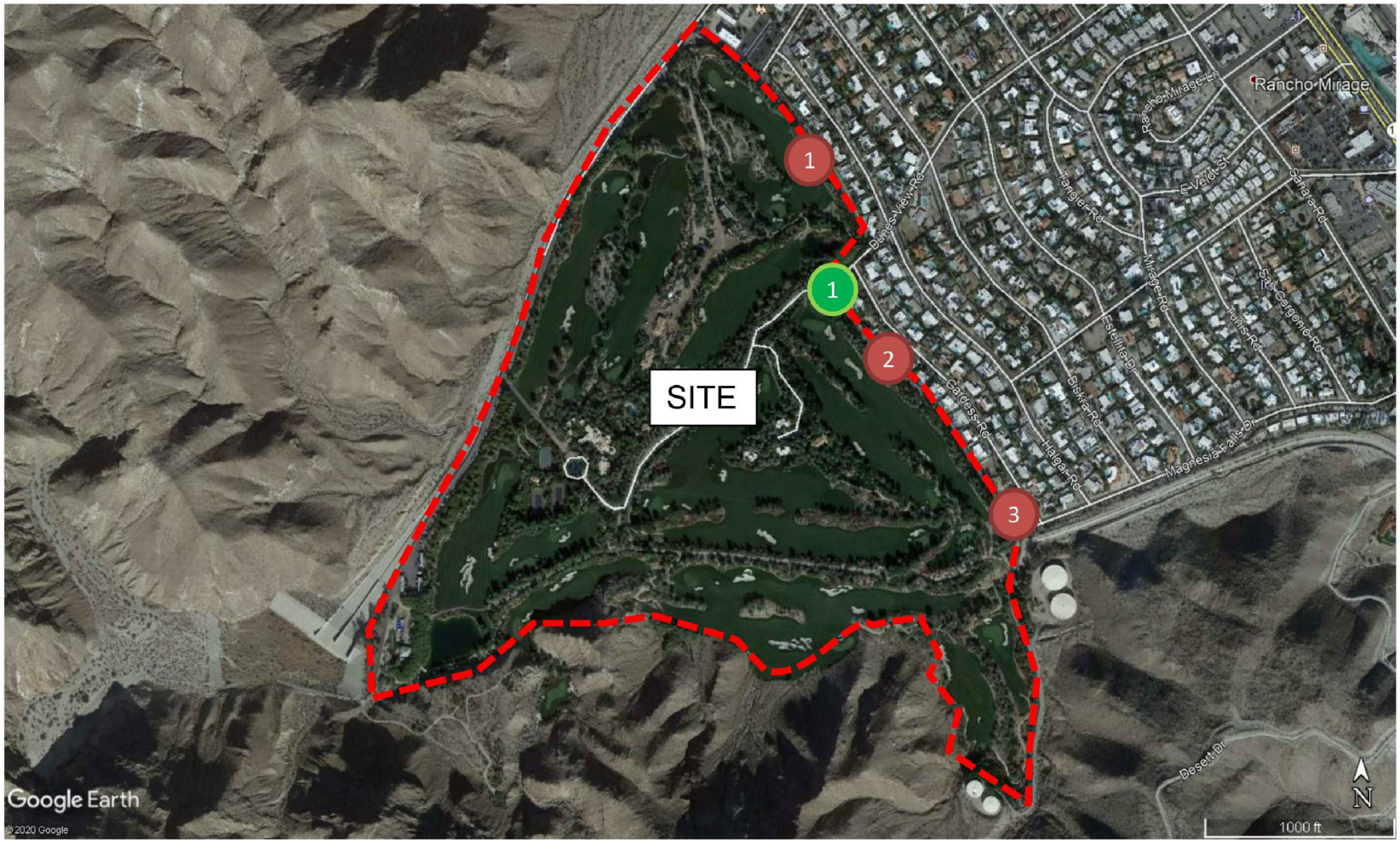
### *Noise Measurement Locations*

Noise monitoring locations were selected based on the distance to the nearest sensitive receptors or property line. Short-term noise measurements were conducted at three points along the eastern property boundary. Long-term noise measurements were conducted at the property's main entrance, at Dunes View Road. The short-term and long-term noise measurement locations are illustrated in **Exhibit 4.11.1, *Measurement Locations***.

X = Short-Term Measurement location

X = Long-Term Measurement location

= boundary

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# MEASUREMENT LOCATIONS

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.11.1*

### *FHWA Traffic Noise Prediction Model/SoundPlan*

Traffic noise from vehicular traffic was projected using a computer program that replicates the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Roadway volumes and percentages correspond to the project's ADT forecast as prepared by Fehr and Peers (August 2020) and roadway classification. The referenced traffic data was applied to the model. The following outlines the key adjustments made to the REMEL for the roadway inputs.

- Roadway classification (e.g. freeway, major arterial, arterial, secondary, collector, etc.)
- Roadway Active Width – distance between the center of the outer most travel lanes on each side of the roadway
- Average Daily Traffic Volumes (ADT), Travel Speeds, Percentages of automobiles, medium trucks and heavy trucks
- Roadway grade and angle of view
- Site Conditions (e.g. soft vs. hard)
- Percentage of total ADT which flows each hour through-out a 24-hour period

**Table 4.11.6, *Roadway Parameters and Vehicle Distribution***, and **Table 4.11.7, *Secondary and Collector Vehicle Distribution (Truck Mix)***, indicate the roadway parameters and vehicle distribution utilized for the Noise Impact Study. Average daily traffic data used for the Noise Impact Study was provided by the Porcupine Creek Retreat Traffic Impact Study, by Fehr and Peers.

**Table 4.11.6 Roadway Parameters and Vehicle Distribution**

| Roadway | Segment | Existing ADT | Existing Plus Project ADT | Opening Year | Opening Year Plus Project | Future Year 2040 | Future Year 2040 Plus Project | Speed (MPH) | Site Conditions |
|---|---|---|---|---|---|---|---|---|---|
| Highway SR-111 | North of Mirage Road | 33,419 | 33,469 | 34,530 | 34,580 | 40,630 | 40,680 | 45 | Soft |
| Highway SR-111 | North of Bob Hope | 34,038 | 34,099 | 35,250 | 35,311 | 42,340 | 42,401 | 45 | Soft |
| Highway SR-111 | South of Bob Hope | 45,303 | 45,326 | 45,813 | 45,813 | 55,820 | 55,843 | 45 | Soft |
| Dunes View Road | West of SR-111 | 558 | 636 | 570 | 648 | 590 | 668 | 45 | Soft |
| Mirage Road | West of SR-111 | 646 | 679 | 670 | 703 | 700 | 733 | 45 | Soft |
| Magnesia Falls Drive | West of SR-111 | 1,353 | 1,364 | 1,401 | 1,401 | 1,450 | 1,461 | 45 | Soft |

**Table 4.11.7 Secondary and Collector Vehicle Distribution (Truck Mix)[1]**

| Motor-Vehicle Type | Daytime % (7 am to 7 pm) | Evening % (7 pm to 10 pm) | Night % (10 pm to 7 am) | Total % of Traffic Flow |
|---|---|---|---|---|
| Automobiles | 75.5 | 14.0 | 10.5 | 97.42 |
| Medium Trucks | 48.9 | 2.2 | 48.9 | 1.84 |
| Heavy Trucks | 17.3 | 5.4 | 47.3 | 0.74 |

Notes: 1. Vehicle distribution data is based on Riverside County Mix data for collectors and secondary roadways.

To determine the project's noise impact to the surrounding uses, MD Acoustics generated noise contours for scenarios outlined in **Tables 4.11.6** and **4.11.7**. Noise contours are used to provide a characterization of sound levels experienced at a set distance from the centerline of a subject roadway. They are intended to represent a worst-case scenario and do not take into account structures, sound walls, topography, and/or other sound attenuating features which may further reduce the actual noise level. Noise contours are developed for comparative purposes and are used to demonstrate potential increases/decreases along subject roadways as a result of a project.

In addition, the Noise Impact Study calculated future traffic noise levels at the project site. These calculations can be found in Noise Impact Study (**Appendix G** of this Draft EIR). As determined in the Noise Impact Study, future traffic noise levels at the project site were determined not to have a potentially significant impact. See discussion a. in Project Impacts.

### *FHWA Roadway Construction Noise Model*

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RNCM), together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the project site.

The project was analyzed based on the different construction phases. Construction noise is expected to be loudest during the grading, concrete and building phases of construction. The construction noise calculation output worksheet is located in the Noise Impact Study (**Appendix G** of this Draft EIR). The following assumption relevant to short-term construction noise impacts was used:

- It is estimated that construction will occur over a year to year and a half-time period. Construction noise is expected to be the loudest during the grading, concrete, and building phases. While construction activities could potentially be spread over a longer time period if development occurs in phases, this assumption ensures the analysis and disclosure of the worst-case scenario for possible construction noise impacts.

### *Existing Noise Environment*

Four baseline noise measurements were conducted at the project site. The readings either measured the 24-hour (long-term/hour-by-hour) data or a 10-minute (short-term) reading. The metrics

recorded include Leq, Lmin, Lmax, other statistical (e.g. L2, L8), and the acoustic signature (1/3 octave data). The noise measurements were taken to determine the existing baseline noise conditions. Baseline noise levels included operational noise from lawn/golf course maintenance care, pumps for ponds, golf cart pass-by, patrons using golf course and other course operations.

The results of the noise measurement data is presented in **Table 4.11.8, *Summary of Noise Measurements (dBA)***.

**Table 4.11.8 Summary of Noise Measurements (dBA)**

| Location[1] | Type[2] | Start Time | Leq | Lmax | Lmin | CNEL |
|---|---|---|---|---|---|---|
| LT-1 | 24-hour | 8:00 am | 46.3 to 51.6 | 65.0 | 45.0 | 55.5 |
| ST-1 | 10-min | 8:21 am | 44.5 | 64.9 | 34.0 | N/A |
| ST-2 | 10-min | 8:40 am | 53.0 | 79.6 | 49.6 | N/A |
| ST-3 | 10-min | 8:54 am | 36.4 | 67.8 | 30.6 | N/A |

Notes: 1. LT-1: Dunes View Road entry; ST-1: Within the project boundaries, southwest of 71355 Halgar Road; ST-2: Within the project boundaries, southwest of 71401 Gardess Road; ST-3: Southeast corner of project, at Magnesia Falls Drive.
2. Measurements were taken either of a 24-hour period (LT-1) or a ten-minute interval (ST-1 thru 3). Measurement locations are indicated in Exhibit 4.11.1.

As shown in the table, the long-term data ranged between 46.3 to 51.6 dBA Leq and had a 55.5 CNEL. The short-term readings measured between 36.4 to 53.0 dBA Leq.

### *Future Exterior Noise Methods*

The potential off-site noise impacts caused by the increase in vehicular traffic as a result of the project were calculated at a distance of 50 feet. The distance to the 55, 60, 65, and 70 dBA CNEL noise contours are also provided for reference. The noise level at 50 feet is representative of approximate distances to existing homes along the subject roadway. The noise contours were calculated for the following scenarios and conditions:

- Existing Condition: This scenario refers to the Existing Year traffic noise condition.
- Existing + Project Condition: This scenario refers to the Existing Year plus Project traffic noise condition.
- Opening Year/Buildout 2023 Condition: This scenario refers to the opening year 2023 traffic noise condition.
- Opening Year/Buildout 2023 + Project Condition: This scenario refers to the opening year 2023 plus project traffic noise condition.
- Future Year 2040 Condition: This scenario refers to the Future Year 2040 traffic noise condition.
- Future Year 2040 + Project Condition: This scenario refers to the Future Year 2040 plus project traffic noise condition.

## Project Design Features

Project design features related to project-induced noise impacts are analyzed in the following discussions.

## Project Impacts

### *a. Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies*

#### *Construction Noise Impact*

The amount, or degree, of construction-related noise at the project site may vary depending on the location of the construction activities, as well as the construction stage occurring. Noise levels associated with the construction will vary with the different phases of construction. The construction noise level projections are provided in the subsequent sections. Per the Noise Impact Study, construction activities would take place approximately 600 feet from the closest sensitive receptor (the residential properties to the east). Therefore, construction noise levels were calculated and modeled to occur approximately 600 feet from the closest sensitive receptor.

*Construction Noise*

The Environmental Protection Agency (EPA) has compiled data regarding the noise generated characteristics of typical construction activities. The data is presented in the table below:

**Table 4.11.9 Typical Construction Noise Levels**

| Type | Noise Levels (dBA) at 50 feet |
|---|---|
| **Earth Moving** | |
| Compactors (Rollers) | 73 - 76 |
| Front Loaders | 73 - 84 |
| Backholes | 73 - 92 |
| Tractors | 75 - 95 |
| Scrapers, Graders | 78 - 92 |
| Pavers | 85 - 87 |
| Trucks | 81 - 94 |
| **Materials Handling** | |
| Concrete Mixers | 72 - 87 |
| Concrete Pumps | 81 - 83 |
| Cranes (Movable) | 72 - 86 |
| Cranes (Derrick) | 85 -87 |
| **Stationary** | |
| Pumps | 68 - 71 |
| Generators | 71 - 83 |
| Compressors | 75 - 86 |
| **Impact Equipment** | |
| Saws | 71 - 82 |
| Vibrators | 68 - 82 |

*Source: Noise Impact Study, MD Acoustics, Table 8.*
Notes: Referenced Noise Levels from the Environmental Protection Agency

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during the grading phase. A likely worst-case construction noise scenario during grading assumes the use of a grader, a dozer, and two (2) backhoes operating at 600 feet from the nearest sensitive receptor.

Project-related construction noise is anticipated to have a temporary or periodic increase in the existing ambient noise level in the project's vicinity. **Table 4.11.10, *Construction Noise Projections***, provides the anticipated construction noise level associated with different phases of construction. Noise levels are anticipated to range between 57 to 59 dBA Leq with maximum levels reaching up to 62 dBA. Calculations outputs are provided in the Noise Impact Study (**Appendix G** of this Draft EIR).

**Table 4.11.10 Construction Noise Projections**

| Activity | Leq at 600 feet dBA | Lmax at 600 feet dBA |
|---|---|---|
| Demolition | 57 | 61 |
| Grading | 59 | 62 |
| Building Construction | 57 | 59 |
| Paving | 57 | 61 |

*Source: Noise Impact Study, MD Acoustics, Table 9*
Note: Equipment and modelling assumptions follow CalEEMod.

The maximum noise level of 62 dBA is considered normally acceptable near residential and school facility land uses. Construction noise is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City's Municipal Code (Section 8.45.050 (E)).

To ensure that construction activities do not disrupt the adjacent land uses, the following noise reduction measures should be taken:

1. Construction shall occur during the allowable hours per the City's Municipal Code, between 7:00 a.m. to 7:00 p.m.
2. Construction staging areas, as well as stationary construction noise sources such as generators or pumps should be located at least 600 feet from adjacent residential properties to the maximum extent feasible.
3. Idling equipment should be turned off when not in use.
4. During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.
5. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

These noise reduction measures are indicated as **Mitigation Measures NOI-1** through **NOI-5**. With the compliance of these measures, project-related construction noise would be less than significant.

### *Exterior Noise Levels*

#### *Off-site Traffic Noise Impact*

The Noise Impact Study analyzed the potential off-site traffic noise impacts caused by project-related increase in vehicular traffic. The off-site traffic noise impacts were calculated at a distance of 50 feet, representative of approximate distances to existing homes along the subject roadways. The Noise Impact Study also included the distance to the 55, 60, 65, and 70 dBA CNEL noise contours for reference. The noise contours were calculated for the six scenarios and conditions including: (1) Existing Conditions, (2) Existing Plus Project Conditions, (3) Opening Year/Buildout 2023 Condition, (4) Opening Year/Buildout 2023 Plus Project Condition, (5) Future Year 2040 Condition, and (6) Future Year 2040 Plus Project Condition. These conditions are described above, in the Methodology section of this chapter. Results of the conditions are as provided subsequently.

<u>Existing and Existing Plus Project Scenario Comparison</u>

According to the Porcupine Creek Retreat Noise Impact Study, the increase in traffic noise for the Existing and the Existing Plus Project scenario would have a nominal increase of up to 0.6 dBA at 50 feet from the centerline of the subject roadway, which is an increase that is not perceptible to the human ear. Therefore, impacts of the Existing Plus Project Scenario is not significant. The existing

exterior noise levels with and without the project are indicated in **Tables 4.11.11, *Existing Without Project Exterior Noise Levels,*** and **4.11.12, *Existing With Project Exterior Noise Levels***, respectively. The comparison of the two scenarios is indicated in **Table 4.11.13, *Change in Existing Noise Levels as a Result of Project***.

**Table 4.11.11 Existing Without Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 73.3 | 83 | 178 | 383 | 825 |
| Highway SR-111 | North of Bob Hope | 73.3 | 84 | 180 | 388 | 835 |
| Highway SR-111 | South of Bob Hope | 74.6 | 101 | 218 | 469 | 1,011 |
| Dunes View Road | West of SR-111 | 55.1 | 5 | 11 | 24 | 51 |
| Mirage Road | West of SR-111 | 55.8 | 6 | 12 | 26 | 56 |
| Magnesia Falls Drive | West of SR-111 | 59.0 | 9 | 20 | 43 | 92 |

**Table 4.11.12 Existing With Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 73.3 | 83 | 178 | 383 | 826 |
| Highway SR-111 | North of Bob Hope | 73.4 | 84 | 180 | 388 | 836 |
| Highway SR-111 | South of Bob Hope | 74.6 | 101 | 218 | 469 | 1,011 |
| Dunes View Road | West of SR-111 | 55.7 | 6 | 12 | 26 | 56 |
| Mirage Road | West of SR-111 | 56.0 | 6 | 13 | 27 | 58 |
| Magnesia Falls Drive | West of SR-111 | 59.0 | 9 | 20 | 43 | 93 |

**Table 4.11.13 Change in Existing Noise Levels as a Result of Project**

| Roadway[1] | Segment | CNEL at 50 feet dBA[2] | | | |
|---|---|---|---|---|---|
| | | Existing Without Project | Existing With Project | Change in Noise Level | Potential Significant Impact |
| Highway SR-111 | North of Mirage Road | 73.3 | 73.3 | 0.0 | No |
| Highway SR-111 | North of Bob Hope | 73.3 | 73.4 | 0.0 | No |
| Highway SR-111 | South of Bob Hope | 74.6 | 74.6 | 0.0 | No |
| Dunes View Road | West of SR-111 | 55.1 | 55.7 | 0.6 | No |
| Mirage Road | West of SR-111 | 55.8 | 56.0 | 0.2 | No |
| Magnesia Falls Drive | West of SR-111 | 59.0 | 59.0 | 0.0 | No |

Notes: 1. Exterior noise levels calculated at 5 feet above ground level.
2. Noise levels calculated from centerline of subject roadway.

Opening Year/Buildout 2023 and Opening Year 2023 Plus Project Scenario Comparison

The Noise Impact Study compared the Open Year/Buildout 2023 scenario with the Opening Year 2023 Plus Project Scenario to determine if impacts of project implementation would be significant. Per the Study, the increase in traffic noise for the Existing and the Existing Plus Project scenario would have

a nominal increase of up to 0.6 dBA at 50 feet from the centerline of the subject roadway. Similar to the previous scenario comparison, this is not an increase that is perceivable by people. The opening year 2023 exterior noise levels with and without the project are indicated in **Tables 4.11.14, *Opening Year/Buildout 2023 Without Project Exterior Noise Levels,*** and **4.11.15, *Opening Year/Buildout 2023 With Project Exterior Noise Levels***, respectively. The comparison of the two scenarios is indicated in **Table 4.11.16, *Change in Opening Year 2023 Noise Levels as a Result of Project***.

**Table 4.11.14 Opening Year/Buildout 2023 Without Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 73.4 | 84 | 182 | 392 | 843 |
| Highway SR-111 | North of Bob Hope | 73.5 | 86 | 184 | 397 | 855 |
| Highway SR-111 | South of Bob Hope | 74.7 | 103 | 223 | 480 | 1,033 |
| Dunes View Road | West of SR-111 | 55.2 | 5 | 11 | 24 | 52 |
| Mirage Road | West of SR-111 | 55.9 | 6 | 12 | 27 | 58 |
| Magnesia Falls Drive | West of SR-111 | 59.1 | 9 | 20 | 44 | 94 |

**Table 4.11.15 Opening Year/Buildout 2023 With Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 73.4 | 84 | 182 | 392 | 844 |
| Highway SR-111 | North of Bob Hope | 73.5 | 86 | 184 | 397 | 856 |
| Highway SR-111 | South of Bob Hope | 74.7 | 103 | 223 | 480 | 1,033 |
| Dunes View Road | West of SR-111 | 55.8 | 6 | 12 | 26 | 56 |
| Mirage Road | West of SR-111 | 56.1 | 6 | 13 | 28 | 60 |
| Magnesia Falls Drive | West of SR-111 | 59.1 | 9 | 20 | 44 | 94 |

**Table 4.11.16 Change in Opening Year/Buildout 2023 Noise Levels as a Result of Project**

| Roadway | Segment | CNEL at 50 feet dBA[1] | | | |
|---|---|---|---|---|---|
| | | Existing Without Project | Existing With Project | Change in Noise Level | Potential Significant Impact |
| Highway SR-111 | North of Mirage Road | 73.4 | 73.4 | 0.0 | No |
| Highway SR-111 | North of Bob Hope | 73.5 | 73.5 | 0.0 | No |
| Highway SR-111 | South of Bob Hope | 74.7 | 74.7 | 0.0 | No |
| Dunes View Road | West of SR-111 | 55.2 | 55.2 | 0.6 | No |
| Mirage Road | West of SR-111 | 55.9 | 55.9 | 0.2 | No |
| Magnesia Falls Drive | West of SR-111 | 59.1 | 59.1 | 0.0 | No |

Notes: 1. Exterior noise levels calculated at 5 feet above ground level.
2. Noise levels calculated from centerline of subject roadway.

Future Year 2040 and Future Year 2040 + Project Scenario Comparison

According to the Noise Impact Analysis, the Future Year 2040 and the Future Year 2040 Plus Project scenarios indicates that an increase in traffic noise for the Existing and Existing Plus Project would have a nominal increase of up to 0.5 dBA at 50 feet from the centerline of the subject roadways, which is not perceivable by people. Therefore, impacts are less than significant. The future year 2040 exterior noise levels with and without the project are indicated in **Tables 4.11.17** and **4.11.18**, respectively. The comparison of the two scenarios is indicated in **Table 4.11.19, *Change in Future Year 2040 Noise Levels as a Result of Project***.

These are indicated in the following tables.

**Table 4.11.17 Future Year 2040 Without Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 74.1 | 94 | 203 | 436 | 940 |
| Highway SR-111 | North of Bob Hope | 74.3 | 97 | 208 | 449 | 966 |
| Highway SR-111 | South of Bob Hope | 75.5 | 116 | 250 | 539 | 1,162 |
| Dunes View Road | West of SR-111 | 55.4 | 5 | 11 | 25 | 53 |
| Mirage Road | West of SR-111 | 56.1 | 6 | 13 | 28 | 59 |
| Magnesia Falls Drive | West of SR-111 | 59.3 | 10 | 21 | 45 | 97 |

**Table 4.11.18 Future Year 2040 With Project Exterior Noise Levels**

| Roadway | Segment | CNEL at 50 ft (dBA) | Distance to Contour (ft) | | | |
|---|---|---|---|---|---|---|
| | | | 70 dBA CNEL | 65 dBA CNEL | 60 dBA CNEL | 55 dBA CNEL |
| Highway SR-111 | North of Mirage Road | 74.1 | 94 | 203 | 437 | 941 |
| Highway SR-111 | North of Bob Hope | 74.3 | 97 | 208 | 449 | 967 |
| Highway SR-111 | South of Bob Hope | 75.5 | 116 | 250 | 539 | 1,162 |
| Dunes View Road | West of SR-111 | 55.9 | 6 | 12 | 27 | 58 |
| Mirage Road | West of SR-111 | 56.3 | 6 | 13 | 28 | 61 |
| Magnesia Falls Drive | West of SR-111 | 59.3 | 10 | 21 | 45 | 97 |

**Table 4.11.19 Change in Future Year 2040 Noise Levels as a Result of Project**

| Roadway | Segment | CNEL at 50 feet dBA[1] | | | |
|---|---|---|---|---|---|
| | | Existing Without Project | Existing With Project | Change in Noise Level | Potential Significant Impact |
| Highway SR-111 | North of Mirage Road | 74.1 | 74.1 | 0.0 | No |
| Highway SR-111 | North of Bob Hope | 74.3 | 74.3 | 0.0 | No |
| Highway SR-111 | South of Bob Hope | 75.5 | 75.5 | 0.0 | No |
| Dunes View Road | West of SR-111 | 55.4 | 55.9 | 0.5 | No |
| Mirage Road | West of SR-111 | 56.1 | 56.3 | 0.2 | No |
| Magnesia Falls Drive | West of SR-111 | 59.3 | 59.3 | 0.0 | No |

Notes: 1. Exterior noise levels calculated at 5 feet above ground level.
2. Noise levels calculated from centerline of subject roadway.

The increase in traffic noise to off-site receptors for each scenario analyzed is nominal as the maximum increase in traffic noise is anticipated to be 0.6 dBA. The increase is considered not significant and no mitigation is required. Furthermore, existing residences located along subject roadways fall within the City's 55 dBA CNEL land use compatibility matrix. Therefore, the project would remain compliant to the City's noise regulations (see **Table 4.11.3*, Rancho Mirage Land Use Compatibility Noise Guidelines***, for reference).

*On-Site Traffic Noise Impact*

Per the City's noise compatibility matrix outdoor noise levels are normally acceptable up to 70 dBA CNEL. Traffic noise impacts to the project site are anticipated to be within the 55 dBA CNEL (similar to the measured baseline/existing condition). The project's noise impact is below the 70 dBA CNEL threshold, therefore no additional mitigation is required.

*Stationary Noise Impacts to Adjacent Receptors*

As previously mentioned, the Noise Impact Study performed a 24-hour noise reading at the property line of the project site and adjacent sensitive receptors. The baseline noise condition incorporates existing golf and estate operations. Baseline noise readings ranged between 46.3 to 51.6 dBA Leq and had a CNEL of 55 dBA.

Since the proposed project will include similar uses and operations to the baseline conditions, the project's potential operational noise will also be consistent with the baseline conditions. Baseline noise levels included operational noise from lawn/golf course maintenance care, pumps for ponds, golf cart-pass-by, patrons using golf course and other estate operations. While some estate uses may be modestly expanded with the retreat project, stationary noise sources are not anticipated to increase substantially and would remain well below the City's allowed exterior noise levels, and the Project will be subject to the City's noise ordinance. Thus, the project will remain in compliance with the City's noise restrictions and General Plan noise compatibility matrix. No additional mitigation is required. Less than significant impacts are anticipated.

## *b. Generation of excessive groundborne vibration or groundborne noise levels*

*Construction Vibration Impacts*

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. This ground-borne vibration caused by construction activities may be felt by the adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during

construction may be from a bulldozer, which has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet. This is perceptible but below any risk to architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows: $PPV_{equipment} = PPV_{ref} (100/D_{rec})^n$

*Where: PPV ref = reference PPV at 100 feet.*
*Drec = distance from equipment to receiver in feet.*
*n = 1.1 (the volume related to the attenuation rate through ground)*

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in **Table 4.11.20, *Guideline Vibration Damage Potential Threshold Criteria*,** provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

**Table 4.11.20 Guideline Vibration Damage Potential Threshold Criteria**

| Structure and Condition | Maximum PPV (in/sec) | |
|---|---|---|
| | Transient Sources | Continuous/Frequent Intermittent Sources |
| Extremely fragile historic buildings, ruins, ancient monuments | 0.12 | 0.08 |
| Fragile buildings | 0.2 | 0.1 |
| Historic and some old buildings | 0.5 | 0.25 |
| Older residential structures | 0.5 | 0.3 |
| New residential structures | 1.0 | 0.5 |
| Modern industrial/commercial buildings | 2.0 | 0.5 |

*Source: Transportation and Construction Vibration Guidance Manual, Table 19, Caltrans, September 2013.*

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

**Table 4.11.21, *Vibration Source Levels for Construction Equipment,*** provides the approximate vibration levels for various construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

**Table 4.11.21 Vibration Source Levels for Construction Equipment**

| Equipment | Peak Particle Velocity (inches/second) at 25 feet | Approximate Vibration Level LV (dVB) at 25 feet |
|---|---|---|
| Pile driver (impact) | 1.518 (upper range) | 112 |
| | 0.644 (typical) | 104 |
| Pile driver (sonic) | 0.734 (upper range) | 105 |
| | 0.170 (typical) | 93 |
| Clam shovel drop (slurry wall) | 0.202 | 94 |
| Hydromill | 0.008 in soil | 66 |
| (slurry wall) | 0.017 in rock | 75 |
| Vibratory Roller | 0.21 | 94 |
| Hoe Ram | 0.089 | 87 |
| Large bulldozer | 0.089 | 87 |
| Caisson drill | 0.089 | 87 |
| Loaded trucks | 0.076 | 86 |
| Jackhammer | 0.035 | 79 |
| Small bulldozer | 0.003 | 58 |

*Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, Table 7-4, September 2018.*

At a distance of 600 feet, a large bulldozer would yield a worst-case 0.003 PPV (in/sec) which is not perceivable and below any risk of damage (0.5 in/sec PPV is the threshold of residential structures). Therefore project-related ground-borne vibration will be less than significant during construction. Mitigation is not required.

## 4.11.5 Cumulative Impacts

The construction and operation of the proposed project would not result in significant long-term impacts regarding noise or vibration. Construction-related noise would lead to a small increase in ambient noise; however, construction activities are short-term and would not continue after construction is complete. Construction-related ground-borne vibration would lead to a small increases in vibrations, however, it would not create vibrations large enough to impact surrounding uses.

As stated in the findings of this noise discussion, the long-term impacts of off-site noise construction were analyzed in the Noise Impact Study. Per the Noise Impact Study, the Existing with Project, Opening Year 2023 with Project, and Future Year 2040 with Project scenarios were compared to the Existing, Opening Year 2023, and Future Year 2040 without Project scenarios. This comparison concluded that off-site traffic noise would be less than significant, and no mitigation is required. Additionally, on-site traffic and stationary noise produced by project operations would not lead to a significant increase in noise, and no mitigation is required. Cumulative impacts are not anticipated to be significant.

## 4.11.6 Mitigation Measures

Though construction activities that generate noise and vibration are considered to be temporary, intermittent and of short duration, they will not present any long-term impacts. Regardless, the following abatement measures have been identified to reduce noise level increases produced by the construction equipment to the nearby noise-sensitive residential land uses:

**NOI-1** Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the permissible hours of 7:00 a.m. to 7:00 p.m.

**NOI-2** Construction staging areas, as well as stationary construction noise sources such as generators or pumps, should be located at least 600 feet from adjacent residential properties to the maximum extent feasible.

**NOI-3** Idling equipment should be turned off when not in use.

**NOI-4** During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.

**NOI-5** Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

## 4.11.7 Level of Impact Significance after Mitigation

With implementation of **Mitigation Measures NOI-1** through **NOI-5** during construction of the proposed project, potentially significant impacts would be less than significant.

## 4.11.8 Resources

1. Porcupine Creek Retreat Noise Impact Study, MD Acoustics, Inc., August 2020.
2. Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, September 2018, available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf accessed August 2020.
3. Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013, available at https://www.contracosta.ca.gov/DocumentCenter/View/34120/Caltrans-2013-construction-vibration-PDF?bidId=, accessed August 2020.

# 4.12 Public Services

## 4.12.1 Introduction

This section addresses the potential change in impacts to fire protection, emergency medical services, and police protection that may result from construction or operation of the proposed Porcupine Creek Retreat Specific Plan project ("project"). The following discussion addresses existing police and fire conditions of the project site and surroundings, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable. This section is based on the information contained in the *Porcupine Creek Retreat Specific Plan* and the *Rancho Mirage 2017 General Plan Update*. Sources used in the preparation of this section are identified in **Chapter 8, *References,*** at the end of this Draft EIR.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with public services at the project property. The Porcupine Creek Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to public services in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

*Schools*

- The proposed project site is within the boundary of the PSUSD. The project site is a private residential estate that is not utilized as a primary residence and does not generate school age children. The project is proposing to develop up to a total of 50 studio, single bedroom, and multi-room keys as part of a private wellness retreat. Occupancy of these additional rooms would be transitory, and any additional employment generated by the project is likely to be filled by the local workforce similar to the existing conditions. Employees from the local workforce are already established in the community and would not generate new school age children requiring public education. Therefore, no further discussion is provided in this section.

*Parks*

- Porcupine Creek estate provides guests with convenient access to a variety of high-quality open space and recreational amenities without leaving the property. The proposed project would build upon the existing open space and recreational amenities as part of the enhancement of the all-inclusive retreat experience. Therefore, no further discussion is provided in this section.

*Other Public Facilities*

- The project's proposed wellness retreat is expected to be occupied by guests that will remain onsite for most of their stay. These stays are transitory and would not create a permanent population that would substantially impact other governmental facilities, including the Rancho Mirage Library. Therefore, no further discussion is provided in this section.

Impacts found to be less than significant are further discussed in **Section 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms, definitions, and acronyms used in this Draft EIR.

## 4.12.2 Existing Conditions

### *Fire Protection Services*

The project is located within the City of Rancho Mirage which is served by the Riverside County Fire Department (RCFD). The City is provided with a full range of fire protection services are offered by RCFD in cooperation with Cal-Fire, 24 hours a day 7 days a week. The City entered into a cooperative agreement with the County of Riverside, through its Cooperative Fire Programs Fire Protection Reimbursement Agreement. This agreement ensures the city is provided with an array of full services from fire protection to hazardous materials discharge and medical emergencies. RCFD partners with 21 cities for contract services, which include most of the Coachella Valley. The fire department operates under a Regional Fire Protection Program, which allows all their fire stations to provide support as needed regardless of jurisdictional boundaries.

The City's Fire Department is made up of 27 sworn, 2 full time non-sworn and 1 part time non-sworn personnel. There are two fire stations within the City of Rancho Mirage, Fire Station 50 and Station 69. Fire Station 50 is located at 70-801 Highway 111 and is approximately 1.5 miles from the project site. This station covers the southern portion of the City and is equipped with a Medic Engine and Paramedic Ambulance. Five firefighters are staffed at this station daily and three of the five firefighters are paramedics. Fire Station 69 is located at 71-751 Gerald Ford Drive and is approximately 4 miles from the project site. This station covers the northern portion of Rancho Mirage and is equipped with the same number of staffing as Station No. 50.

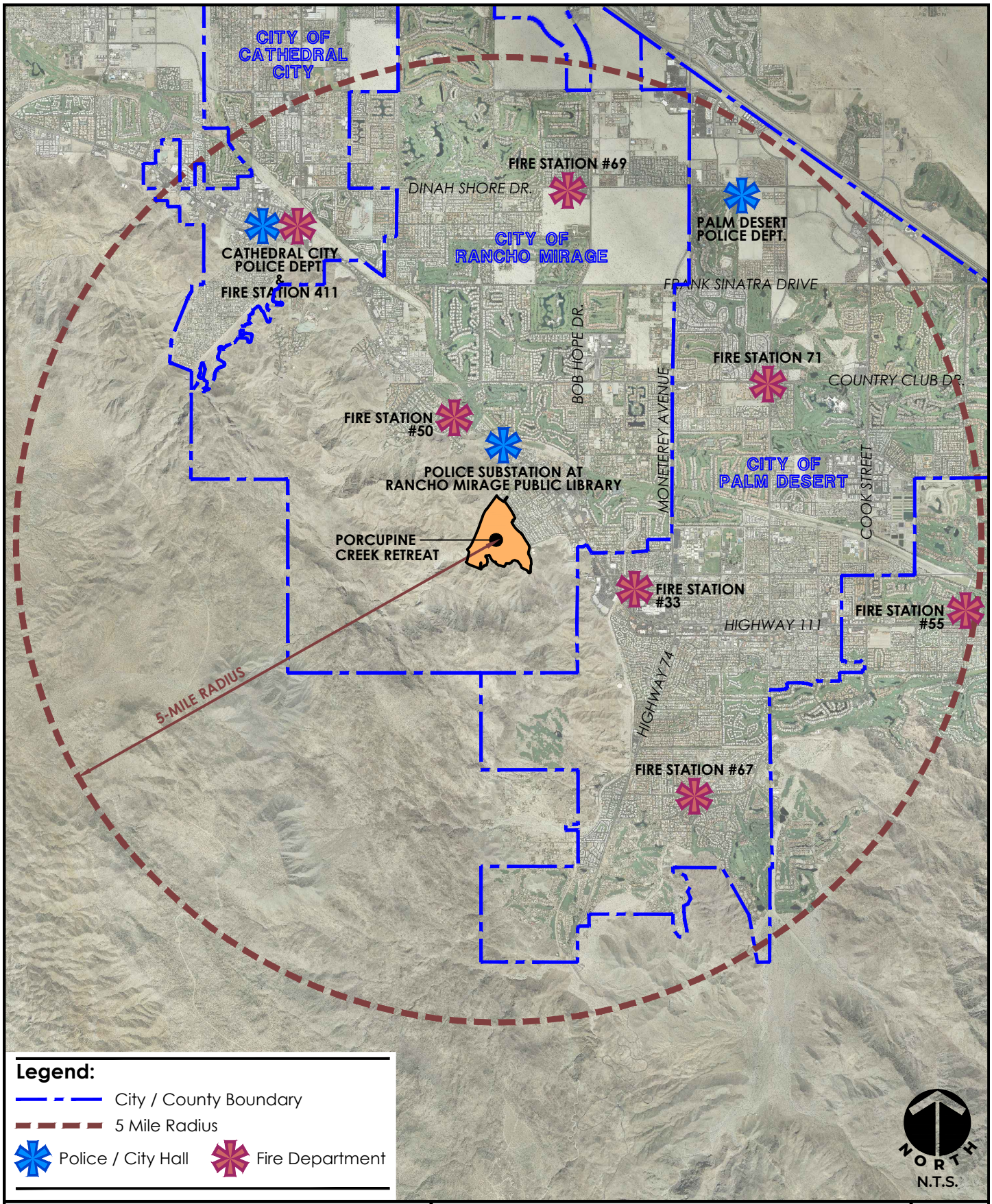
As shown in **Exhibit 4.12.1, *Fire and Police Service Radius*,** two additional fire stations located in Palm Desert (stations 33 and 71) are also within proximity to the project site and could provide fire protection and emergency services. Station No. 33 is approximately 1.8 miles from the project site and Station No. 71 is approximately 3.7 miles away. Station No. 50 is currently the first responder to the project site and Station No. 33 is the next closest Fire Station that would respond in the event Station No. 50 is out responding to an emergency call. Station 33 is equipped with a Paramedic Engine, Ambulance, and one

ladder truck. This Station has a daily staffing of 9 firefighters with 3 of them being paramedics. The typical response time from RCFD is five minutes.

### *Police Protection*

Law enforcement services are provided to the City of Rancho Mirage through a contractual agreement with Riverside County Sheriff's Department. The Sheriff's Department provides 24-hour municipal police services associated with a City police department and serves over 18,000 residents over 25 square miles. In 2019, they responded to over 18,454 calls for service. The Sheriff's Department has a small police substation at the Rancho Mirage Public Library; deputies assigned to work in Rancho Mirage primarily operate out of the Palm Desert station located at 73-705 Gerald Ford Drive. This station is approximately 5.4 miles from the project site. The Sheriff's Department provides emergency and non-emergency responses, police patrol and traffic enforcement.

The Department has a staff of 30 full time sworn and non-sworn officers, of the 30 officers, 25 are sworn. They have a daily staffing of 7 officers that work in two, 12-hour shifts. Four deputy patrol officers work the day shift and 3 deputy patrol officers work the nigh shift. The City currently provides 1.65 officers per resident, which is well above the commonly used and accepted ratio of one officer per 1,000 residents. Police response times vary and are dependent on the location of patrol cars. The average response times in Rancho Mirage for priority 1 calls was 5-6 minutes.

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# FIRE AND POLICE SERVICES

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT

*4.12.1*

## 4.12.3 Regulatory Setting

### State

#### *California Building Code*

The California Building Code establishes the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

#### *California Fire Code*

State fire regulations are set forth in Sections 13000 *et seq*. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices and standards and fire suppression training.

### Local

#### *Rancho Mirage General Plan*

The Rancho Mirage General Plan (RMGP) was adopted in 2017 by the City of Rancho Mirage pursuant to California Government Code 65300 and its subsections. The General Plan provides long-term guidance and policies for maintaining and improving the quality of life as well as the man-made and natural resources of the community. The Police and Fire Protection portion of the Public Services & Facilities element addresses two of the essential functions of governments. The element provides information on the location of police and fire stations, response times and staffing that is currently available to the City. This section also provides information on the, goals, policies, and programs to protect the general health, safety, and welfare of the residents of Rancho Mirage relative to police and fire.

#### *Rancho Mirage Municipal Code*

Title 15 of the Rancho Mirage Municipal Code is implemented for all building and construction occurring in the City. Title 15 is based on the 2019 CBC, which sets minimum design and standards for construction of buildings and structures that must also meet minimum fire requirements.

Rancho Mirage Fire Code (Title 15.12) adopts the 2019 CBC California Fire Code with City amendments and provides required construction standards in new structures and remodels, road widths and configurations to accommodate the passage of fire trucks and engines and requirements for minimum

fire flow rates for water mains. The construction requirements are a function of building size, type, material, purpose, location proximity to other structures, and type of fire suppression system installed.

All new construction within the City of Rancho Mirage is subject to Title 3, Chapter 28 of the Rancho Mirage Municipal Code, this policy lays out the imposed tax on new construction to assist in the financing of public facilities including police, fire protection and suppression services and both emergency and non-emergency services, as a result in the demand for these services.

## 4.12.4 Project Impact Analysis

### Thresholds of Significance

The thresholds derived from Appendix G of the CEQA Guidelines are used to determine the level of potential effect. The proposed project would have a significant effect on population and housing if it is determined that the project will:

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

   Fire protection?

   Police protection?

Threshold topics “Schools”, “Parks”, and “Other Public Utilities” is not analyzed further since screening criterion related to public services concluded that there would be no impacts or less than significant impacts. See 4.12.1, *Introduction,* of this Public Services Section.

### Methodology

This analysis considers whether the proposed project would require the construction of new governmental or recreational facilities or alterations to such facilities to maintain acceptable performance standards for public services.

### Project Design Features

Project design features related to public services are discussed further in the Project Impact discussions below.

### Project Impacts

## *a. Impacts on:*

### *Fire Protection*

*Construction Impacts*

Construction of the proposed project would increase the potential for accidental on-site fires from sources such as the operation of mechanical equipment and flammable construction materials. The implementation of best management practices (BMPs) by the construction contractors and workers would minimize these hazards. Other BMPs measures would include, maintenance of all mechanical equipment to ensure they are in good operating condition, proper storage of flammable materials and the immediate and complete clean-up of any spills that are flammable. The project may also result in construction traffic that could result in partial road closures because of construction trucks moving in and out of the property for grading, debris removal, and delivery of construction materials. These activities could potentially have an impact on emergency services by increasing response times. However, a construction management traffic plan will be required to ensure the project does not impede with RCFDs ability to provide emergency services. A clear and unobstructed path will be maintained to allow the fire department to maintain their standard level of service and response times during project construction. Therefore, impacts to fire services during construction would be less than significant.

*Operational Impacts*

The project is expected to have an incremental increase to the number of calls for fire services compared to the existing use, since the proposed all-inclusive retreat is a more intensive land use. The proposed wellness retreat would accommodate guests for a limited stay and would not increase the permanent population, like a standard residential project. Service calls could place an additional demand on fire personnel, fire apparatus and equipment. However, the project site is located in a developed urban area of the City, and approximately 1.5 miles away from Fire Station No. 50 and 1.8 miles away from Fire Station No. 33. Therefore, the project would not necessitate the construction or alternation of a fire station in order to continue to serve the site at its current level, nor would it impact the current response times. Fire Station No. 50 would be the primary station to respond to calls from the project, given its proximity to the site and ability to respond quickly. Station No. 33 is the second closest station and would respond in the event Station No. 50 is out responding to other calls. Both stations would be able to provide service within the City's five-minute response time.

The project will comply with all existing development standards set forth by the City and RCFD. Development of the project would be required to meet all current and applicable fire and building codes and the City's own Fire Code, as set forth in the Municipal Code (Title 15.12). Moreover, the project will be required to pay Development Impact Fees to assist in offsetting impacts to fire services. As a result of compliance with these existing regulations, the project would not increase fire response times and would

not interfere with RCFDs ability to provide service to the City. Therefore, impacts to fire services would be less than significant with mitigation.

### *Police protection*

*Construction*

Construction impacts to police would be similar to those faced by fire in that construction traffic could result in partial road closures because of construction trucks moving in and out of the property for grading, debris removal, and delivery of construction materials. These activities could potentially have an impact on emergency services by increasing response times. However, a construction management traffic plan will be required to ensure the project does not impede with the Sheriff's Department ability to provide service during project construction. The construction site would be secured on the property where existing security measures are already in place. Therefore, impacts to police services during construction would be less than significant.

*Operational Impacts*

The proposed retreat includes up to a total of 50 keys on the existing property, which is slightly more than a 50% increase over the current number of keys. This increase would allow for additional guest accommodations on the property and would not introduce a permanent population. Moreover, the property's existing private security staff would continue to be present. However, an increase in activity on the site could increase calls for police service. Correspondence received from the Riverside County Sheriff's Department, indicated that the Sheriff's department has no reservations about the project. The Department has a staff of 30 full time sworn and non-sworn officers, of the 30 officers, 25 are sworn. They have a daily staffing of 7 officers that work in two, 12-hour shifts. Four deputy patrol officers work the day shift and 3 deputy patrol officers work the night shift. The City currently provides 1.65 officers per resident, which is well above the commonly used and accepted ratio of one officer per 1,000 residents. The project site is in an existing urban area and is currently serviced by the Sheriff's Department. Therefore, the proposed project would not substantially increase the need for new or expanded police facilities and response times are not expected to be impacted. Additionally, all new construction in the City will be required to pay Development Impact Fees to assist in offsetting impacts to police services. Impacts to police services are less than significant with mitigation.

## 4.12.5 Cumulative Impacts

As discussed above, implementation of the proposed will not result in project-level effects to fire and police services. Considered in combination with other cumulative development within the City and its Sphere of Influence, there is likely to be a demand increase to services provided by RCFD and the Sheriff's Department. Other present and reasonably foreseeable development within the area would be addressed case by case during the development and review of such development. This would ensure

that services to accommodate current and future citywide growth could be reasonably provided within the cumulative context. As discussed above, all new development will be required to contribute to the payment of Development Impact Fees (Title 3, Chapter 28 of the Rancho Mirage Municipal Code) which would go towards minimizing impacts to fire and police services. Therefore, with adherence to goals, policies and programs as identified in this section, all new development within the proposed project will assist in minimizing cumulative impacts in regard to fire and police services and are expected to be less than significant.

## 4.12.6 Mitigation Measures

**PS-1:** The project shall comply with all applicable federal, state, regional, and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City, and Riverside County Fire Department.

**PS-2:** Prior to building permits, the project shall pay the City's Development Impact Fees for police and fire services to aid in offsetting the cost of additional law enforcement and fire services.

## 4.12.7 Level of Significance after Mitigation

Implementation of existing regulations and standards identified above would ensure that, along with the project's design features and adherence to **Mitigation Measures PS-1** and **PS-2**, the project's potential impacts associated with public services related to fire and police emergency and non-emergency services would be reduced to a less than significant level.

## 4.12.8 Resources

1. Bryan White, Battalion Chief, Cal Fire/Riverside County Fire, email correspondence June 11, 2020
2. City of Rancho Mirage, City Departments, Police website https://ranchomirageca.gov/our-city/city-departments/police/
3. Lt. Chris Willison, Riverside County Sheriff Department, Rancho Mirage Police, phone call, June 16, 2020
4. Rancho Mirage 2017 General Plan, Chapter 9 Public Services and Facilities

# 4.13 Transportation

## 4.13.1 Introduction

This section describes the existing setting and proposed improvements to intersections and roadways required for the implementation of the Porcupine Creek Retreat Specific Plan ("SP" or "project".) This section evaluates the potential for the proposed SP to result in transportation and traffic impacts within the Coachella Valley, the City of Rancho Mirage and surrounding communities. This section is based on the information contained in the *Porcupine Creek Retreat Transportation Assessment Memo* (TAM*),* prepared by Fehr and Peers, October 2020, the city of *Rancho Mirage General Plan Update (RMGPU) Circulation Element* and the *General Plan Update Traffic Impact Analysis* (TIA) prepared by Urban Crossroads, March 2017. The TAM is included as **Appendix H** of this EIR.

The TAM analyzed traffic impacts for existing conditions and existing plus project conditions for the following scenarios: Existing (2020) Conditions; Existing (2020) Plus Project Conditions; Opening Year (2023) Conditions; Opening Year (2023) Plus Project.

## 4.13.2 Existing Conditions

The proposed mixed-use project site consists of a roughly triangular property, currently the location of a private estate with multiple existing amenities. The existing property, including main house, casitas, villas and golf course currently operates very similarly to an active hotel.

The property is generally bounded by the West Magnesia Storm Channel and Mountain Reserve Hillside associated with the Santa Rosa Mountains to the north and west; the East Magnesia Storm Channel and Mountain Reserve Hillside associated with the Santa Rosa Mountains to the south; and Rancho Mirage Elementary School and Magnesia Falls Cove Neighborhood and Blixseth Park to the north and east.

Primary vehicular access occurs at a gated entry at the center of the eastern boundary of the site at Dunes View Road and a secondary gated service entry at the northern property corner at Mirage Road. An existing network of private driveways serves the various existing structures on site. These driveways carry low traffic volumes and accommodate pedestrian and golf cart movement within the project.

### Roadway Facilities

#### *Regional Access*

The project site is located withing the Coachella Valley, in the approximate central portion of the urban development. The Valley is separated from the Great Los Angeles Area to the northwest by the San Gorgonio Pass, through which Interstate 10 (I-10) and the Union Pacific Railroad are the major

transportation corridors. The project site is situated between the desert cities of Cathedral City to the west and Palm Desert to the east.

Regional access in the Coachella Valley is provided by the I-10 Freeway, which provides access through the valley from the northwest to the southeast. I-10 extends from western Los Angeles County, through San Bernardino County and Riverside County to the east across Arizona.

Regional access to the project site is currently available from I-10 via the interchange at Bob Hope Drive. Motorists can access I-10 in both directions through Bob Hope Drive Interchange. Motorists from Palm Springs, Cathedral City, Rancho Mirage can also access the site utilizing Highway III from the west. The communities of La Quinta and Indian Wells can access the site utilizing Highway III from the east.

### *Regional Roads*

SR-111: SR-111 is a state highway that runs in the north-south direction from Calexico at the southernmost end to Whitewater at the northernmost end. Near the study area, SR-111 is a six-lane facility with a posted speed limit that varies between 45 and 55 mph. The City of Rancho Mirage General Plan Circulation Element designates SR-111 as a Major Arterial Six-lane Divided Roadway. This highway is also classified as a Designated Truck Route. The City of Rancho Mirage has assumed responsibility of this facility within the City Limits. Access to the project is provided via Mirage Road, Indian Trail, Rancho Las Palmas Drive, and Magnesia Falls Drive.

### *Local Access Roads*

Although not classified by the City of Rancho Mirage General Plan, the following roadways are local roads that provide access to the project:

- Mirage Road
- Indian Trail
- Sahara Road
- Dune View Road
- Rancho Las Palmas Drive
- Ocotillo Road
- Magnesia Falls Drive

According to the TAM each of these local serving roads have one lane in each travel direction. Mirage Road, Indian Trail, Dunes View Road, Rancho Las Palmas Drive, Ocotillo Road, and Magnesia Falls Drive extend in the east-west direction. Sahara Road extends in the north-south direction. The land use near these roads is primarily residential and the posted speed limit is 30 mph.

## Alternative Transportation

### *Transit Service*

The City of Rancho Mirage is currently served by the SunLine Transit Agency (SunLine.) Sunline provides local transit service throughout the Coachella Valley. Transit services are available in the City through fixed-route and demand-response services. This service also provides access to Metrolink. The nearest Metrolink station is located at the Moreno Valley March Field Station. Transit service is reviewed and updated by the SunLine periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. The following lines provide service near the site.

- Line 111 (Coachella to Palm Springs): This route runs from the intersection of Stevens Road and Palm Canyon Road in Palm Springs and ends at the Vietnam Veterans Park in Coachella. Most of the stops on Line 111 are along SR-111. It operates seven days a week, with different weekday and weekend schedules. Monday thru Friday Line 111 runs from approximately 5:00 AM to 11:00 PM. This route operates on weekends from approximately 5:30 AM to 11:00 PM. The closest bus stop to the project is located 150 feet southwest of the intersection of SR-111 and Rancho Las Palmas Drive. This stop is approximately 0.25 miles from the project entry on Dunes View Road.
- Commuter Link 220 (Palm Desert to Riverside): This route runs from the Metrolink Station in Riverside off Vine Street to the Westfield Mall in Palm Desert. Line 220 has stops that provide access to SR-111, SR-60, the I-10, the I-215, and Banning Municipal Airport. It operates Monday thru Friday from approximately 8:00 AM to 9:30 PM. Users can board the bus once in the morning, around approximately 8:00 AM, and twice in the evening, starting at approximately 3:30 in the westbound direction and 6:00 PM in the eastbound direction. The bus stop closest to the project is near the Westfield Palm Desert Mall in Palm Desert, by the corner of Town Center Way and Hahn Rd.

### *Pedestrian and Alternative Facilities*

There are existing pedestrian facilities (sidewalks) provided along most major roadways in Rancho Mirage. However, most of the roadways directly adjacent to the project site contain undeveloped or discontinued sidewalks, limiting the connectivity in the area. Access to the project site by sidewalk is partially provided along Mirage Road that extends just past Rancho Mirage Elementary School. Pedestrian crossings are provided at signalized intersections with marked crosswalks within the study area.

### *Bikeways*

Caltrans standards are used to design bikeways by most jurisdictions throughout California, and the City of Rancho Mirage adheres to Caltrans bikeway standards. There are four classifications for bicycle facilities: Class I, Class II, Class III and Class IV bikeways.

### *Bicycle Facilities*

#### *Class I Bikeways (Bike Paths)*

The indicates that Class 1 facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed. A Class 1 Bike Path may parallel a roadway (within the parkway) or may be a completely separate right-of-way that meanders through a neighborhood or along a flood control channel of utility right-of-way.

#### *Class II Bikeways (Bike Lanes)*

Class II bicycle facilities are striped lanes that provide bike travel and can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a bike lane adjacent to a parking lane can be four feet in width. Bike lanes are exclusively for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.

#### *Class III Bikeways (Bike Routes)*

Class III Bikeways are streets providing for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage both by the side of the street and stenciled on the roadway surface alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route. Many of the major roadways in Rancho Mirage provide bicycle facilities. Due to the heavy presence of golf courses in Rancho Mirage, many of the Class II facilities also accommodate golf carts. There are no proposed or existing bicycle facilities providing direct access to the project site. The nearest designated bike route is a Class II Bikeway located along Bob Hope Drive approximately 2.0 miles (travel distance) northeast of the subject property. There are no proposed bikeways near the subject property.

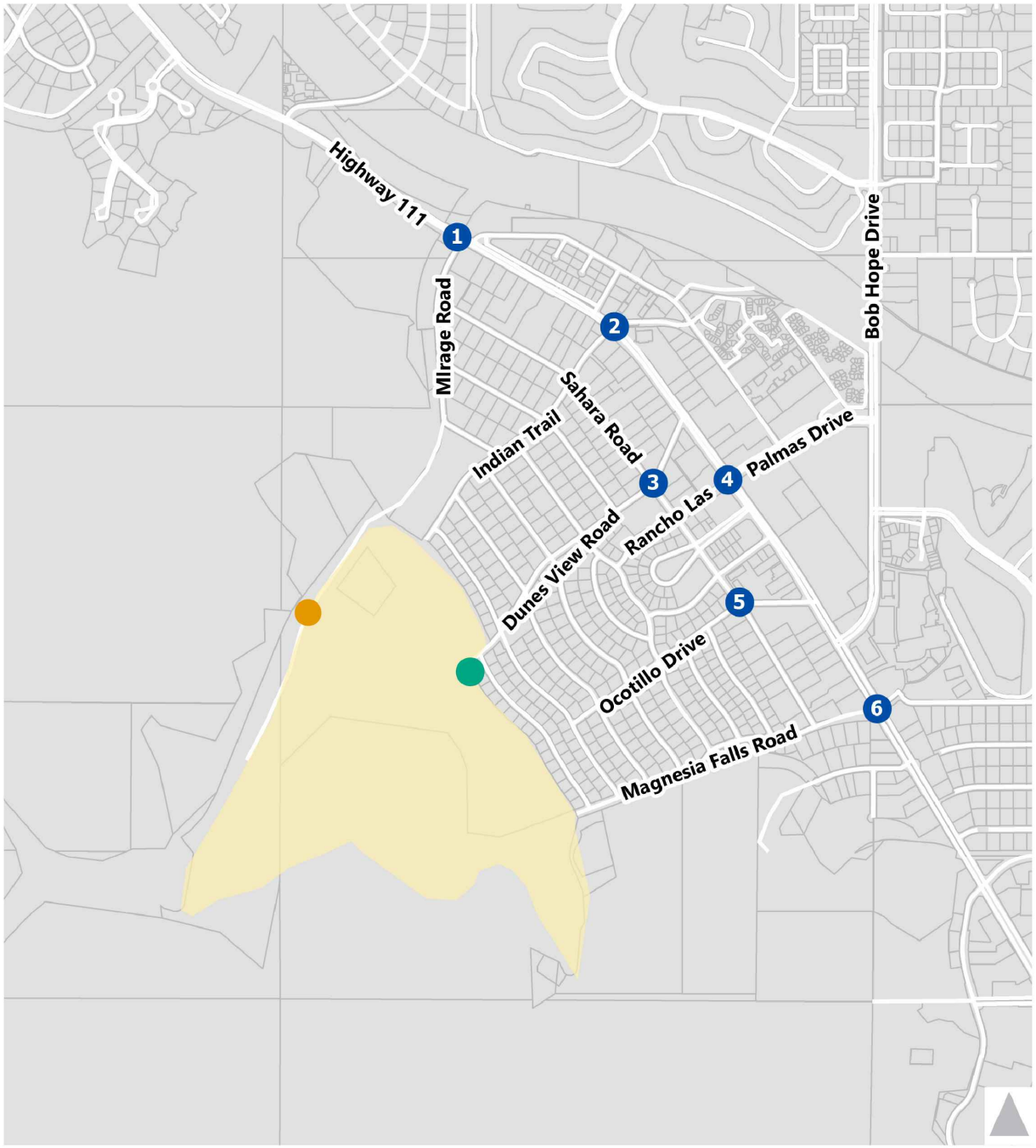
## Study Area

The study area is shown in **Exhibit 4.13.1, TAM *Study Area Roadway Intersections*,** and consists of 6 intersections.

**Table 4.13.1 Study Area Roadway Intersections**

| ID | Segment Location | Traffic Control |
|---|---|---|
| 1 | HWY 111 and Mirage Road | Unsignalized |
| 2 | HWY 111 and Indian Trail | Signalized |
| 3 | Sahara Road and Dunes View Road | Unsignalized |
| 4 | HWY 111 and Rancho Las Palmas Drive | Signalized |
| 5 | Sahara Road and Ocotillo Drive | Unsignalized |
| 6 | HWY 111 and Magnesia Falls Drive | Signalized |

*Source: Porcupine Creek Retreat Transportation Assessment Memo, Fehr and Peers, October 2020.*




Employee Entrance

Guest Entrance

Study Intersection

Project Site

NORTH

N.T.S.

**MSA CONSULTING, INC.**
> PLANNING > CIVIL ENGINEERING > LAND SURVEYING
34200 Bob Hope Drive, Rancho Mirage, CA 92270
760.320.9811 **msaconsultinginc.com**

# TRAFFIC ASSESSMENT MEMO STUDY AREA ROADWAY INTERSECTIONS

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT

*4.13.1*

### Surrounding Land Uses

The existing land uses adjacent to the project site are as follows:

- North – Santa Rosa Mountains
- South – Santa Rosa Mountains
- East – Residential, School, Park
- West – Santa Rosa Mountains

### Area Roadway System

The maximum daily capacity thresholds for roadways provided in the City of Rancho Mirage General Plan Traffic Impact Assessment are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features,) degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards,) sight distance, vehicle mix (truck and bus traffic) and pedestrian bicycle traffic. As such, where the ADT-based roadway segment analysis indicates a deficiency (unacceptable LOS,) a review of the more detailed peak hour intersection analysis and progression analysis are undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes. Roads within the Study Area are a combination of Urban Arterial (Highway 111), and collectors (Dunes View Road, Mirage Road and Magnesia Falls Drive.)

**Table 4.13.2 Roadway Segment Capacity LOS Thresholds**

| Facility Type | Number of Lanes | Capacity (Vehicles per Day) | | |
|---|---|---|---|---|
| | | C | D | E |
| Collector | 2 | 10,400 | 11,700 | 13,000 |
| Secondary | 4 | 20,700 | 23,300 | 25,900 |
| Major | 4 | 27,300 | 30,700 | 34,100 |
| Arterial | 2 | 14,400 | 16,200 | 18,000 |
| Arterial | 4 | 28,700 | 32,300 | 35,900 |
| Urban Arterial | 4 | 28,700 | 32,300 | 35,900 |
| Urban Arterial | 6 | 43,100 | 48,500 | 53,900 |
| Urban Arterial | 8 | 57,400 | 64,600 | 71,800 |
| Expressway | 4 | 32,700 | 36,800 | 40,900 |
| Expressway | 6 | 49,000 | 55,200 | 61,300 |
| Expressway | 8 | 65,400 | 73,500 | 76,500 |

*Source: City of Rancho Mirage General Plan Update, Traffic Impact Analysis, Table 2-3, Urban Crossroads, March 2017.*

## 4.13.3 Regulatory Setting

### State

### *SB 743*

The new recommended metric in the CEQA guidelines for transportation impacts is VMT per capita per SB 743. The legislative intent of SB 743 is to balance the needs of congestion management with statewide goals for infill development, promotion of public health through active transportation and reduction of greenhouse gas emissions.

## Regional and Local Setting

### *Regional Transportation Improvement Plan*

The Regional Transportation Plan (RTP) is a multi-modal long-range planning document prepared by the Southern California Association of Governments (SCAG) in coordination with federal, state and other regional, sub-regional, and local agencies in southern California. The RTP, prepared every three years, addresses future needs based on a 20-year projection. It includes programs and policies for congestion management, transit, bicycle, pedestrians, roadway, freight, and finances. It is intended to be used as a long range plan for federally funded transportation projects.

The Capital Improvement Program (CIP) is a 7-year program including all regional and local capital improvement projects that maintain or improve the LOS for traffic and transit and conform to air quality mitigation measures related to transportation generated emissions. Currently, regional projects are programmed into the Riverside County Transportation Improvement Plan (TIP), while locally funded projects (off the State Highway System) are identified in local agency CIPs.

To comply with Congestion Management Plan (CMP) statutes, CIP requirements may be incorporated into the Regional Transportation Improvement Program (RTIP) for programming of Flexible Congestion Relief (FCR) and urban and commuter rail funds.

### *Congestion Management Program*

The Congestion Management Program (CMP) is intended to link land use, transportation, and air quality with reasonable growth management methods, strategies and programs that effectively utilize new transportation funds to alleviate traffic congestion and related impacts. The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency (CMA) that prepares the Riverside County Congestion Management Program updates in consultation with local agencies, the County of Riverside, transit agencies and sub-regional agencies like the Coachella Valley Association of Governments (CVAG.)

The RCTC has designated a system of highways and roadways to include at a minimum all State Highway facilities within Riverside County and a system of principal arterials as the Congestion Management System (CMS.) All State Highways within Riverside County have been designated as part of the CMP

System of Highways and Roadways. The following facilities are designated as part of the Riverside CMP System of Highways and Roadways within the Coachella Valley.

- I-10 (San Bernardino County Line to State line)
- SR 111 (I-10 to Imperial County Line
- Ramon Road (I-10 to SR 111)
- Monterey Avenue (I-10 to SR 111)

The Riverside County Long Range Transportation Study indicates that most local agencies in Riverside County and Caltrans have adopted Level of Service (LOS) standards of "C" or "D" to maintain a desired LOS for the local circulation system. To address CMP requirements RCTC approved a minimum traffic LOS standard of "E."

Over time, the State has amended the language to allow for voluntary implementation of the CMP. Subsequently AB32 and SB 375 were passed by the legislature that emphasized the reduction of greenhouse gases by reducing vehicle miles traveled (VMT) and the development of a Sustainable Communities Strategy (SCS) that each Metropolitan Planning Organization agency must prepare in conjunction with its Regional Transportation Plan.

HCM-based methodologies applied to calculate LOS for CMP purposes will be the responsibility of local agencies as new development or land use plan revisions/updates (reflective of specific development proposals) are considered.

Senate Bill 743 is intended to result in lower VMT within the County over time. It is expected that lower VMT will result in decreased congestion along major corridors. However, in a county as large as Riverside County, new corridors could potentially reduce VMT by providing a shorter less circuitous route for automobiles and transit.

### *Coachella Valley Regional Arterial Program*

The CVAG administers the Coachella Valley Regional Program, which allocates Measure A and Transportation Uniform Mitigation Fee (TUMF) funds for necessary improvements to the regional transportation system.

Measure A, approved by Riverside County voters in 1988, imposes a half-cent increase in sales tax over a 20-year period to be used for transportation purposes. In November 2002, Riverside County voters approved a 30-year extension of Measure "A" (2009-2039.) Measure A funds contribute a portion of the cost of transportation system improvements projected to be needed over the next 19 years.

The TUMF is a development impact assessment that provides funding for transportation improvements required to support new development based on the number of vehicle trips new development will generate. Approximately 55 percent of the funding provided by CVAG consists of TUMF funds with the remainder consisting of Measure A funds. CVAG prepares a Transportation Project Priority Study (TPPS)

every 5 years to determine funding availability for improvements to regional arterials by prioritizing the eligible study segments based on need.

To conform to CVAG policies, all CVAG member agencies require the construction of adopted road construction standard improvements for missing regional road segments located adjacent to land development projects.

### *Riverside County General Plan*

The County of Riverside General Plan Circulation Element defines LOS D as the minimum acceptable operations on its facilities. According to the County of Riverside Traffic Impact Analysis Guidelines, the following types of traffic impacts are considered for planning purposes:

- When existing traffic conditions exceed the General Plan target LOS
- When project traffic, when added to existing traffic, will deteriorate the LOS to below the target LOS and impacts cannot be improved through project conditions of approval.
- When cumulative traffic exceeds the target LOS, and impacts cannot be improved through the TUMF network (or other funding mechanism,) project conditions of approval, or other implementation mechanisms.

### *City of Rancho Mirage General Plan*

The City has adopted LOS D as the minimum acceptable standard for intersection analysis. Prior to SB 743, a significant traffic impact would occur if the addition of project-generated trips caused an intersection to change from an acceptable LOS to a deficient LOS, or if project traffic increased the delay at any intersection already operating at an unacceptable LOS. Prior to implementation of SB 743's VMT analysis requirements, a project would be considered to have a significant impact if it causes the LOS to change from an acceptable LOS (LOS D or better) to a deficient LOS (LOS E or worse) or increase delay/density on a facility operating at an unacceptable level.[1]

The City has adopted LOS D or maximum volume to capacity ratio of 0.90 as the minimum acceptable standard during peak operating periods for roadway intersection analysis. Currently, LOS analysis provides information regarding intersection capacity and general plan consistency for the City.

Rancho Mirage's Transportation Analysis Policy (Policy) was adopted in June 2020. This Policy aligns the City's transportation analysis with California Senate Bill 743 (SB 743) and the City's goals as set forth in the Rancho Mirage General Plan updated in 2017. This policy establishes the thresholds for transportation impacts under CEQA by introducing Vehicle Miles Traveled (VMT.) As required by SB 743, VMT will replace the former metric used to analyze traffic impacts which was LOS. According to *Table 1*

[1] Although SB 743 replaced the previously required LOS analysis to determine significant impacts under CEQA, this EIR addresses the Project's LOS-related impacts, in addition to the required VMT analysis, to provide additional information regarding the Project's potential impacts to the roads and intersections in the Project's vicinity.

of the Policy, retail project types (including hotel) would result in a significant impact if the project caused a net increase in the total existing VMT for the region.

## 4.13.4 Project Impact Analysis

The following thresholds are derived from Appendix G of the CEQA Guidelines and are used to determine the level of potential effect. The significance determination is based on the recommended criteria set forth in Section 15064 of the CEQA Guidelines. Implementation of the Porcupine Creek Retreat Specific Plan would have a significant effect on Transportation if it is determined that the project will:

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
d. Result in inadequate emergency access?

### Methodology

#### *LOS Methodology*

The TAM was prepared in accordance with the City of Rancho Mirage General Plan Update *Transportation Analysis Policy* and is contained in EIR **Appendix H**.

With the implementation of SB 743, intersection LOS is not calculated to determine transportation impacts, however it provides information regarding intersection capacity and general plan consistency for the City.

The Level of Service (LOS) assessment was performed by analyzing Intersection operating conditions in the study area. Conditions were evaluated using the Highway Capacity Manual (HCM) 6$^{th}$ Edition Transportation Research Board (TRB) methodology, which is considered the state of the practice methodology for evaluating intersection operations and is consistent with the City of Rancho Mirage Standards.

The Vehicle Miles Traveled (VMT) assessment was performed for the project consistent with the Rancho Mirage's Transportation Analysis Policy (Policy) which was adopted in June 2020. The methodology used to estimate a net change in regional VMT is referred to as the Boundary Method and is consistent with the City's identified methodology for retail uses (including hotels.)

<u>Signalized Intersections</u>

The City of Rancho Mirage requires signalized intersection operations analysis based on the methodology described in Chapter 18 and Chapter 31 of the Highway Capacity Manual (HCM) 2010. Intersection LOS operations are based on an intersection's average control delay. Control delay includes

initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in **Table 4.13.3, *Signalized Intersection LOS Thresholds***.

The LOS analysis for signalized intersections was performed using optimized signal timing for existing traffic conditions. Signal timing optimization was considered for pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings was also considered in the signalized intersection analysis.

**Table 4.13.3 Signalized Intersection LOS Thresholds**

| Description | Average Control Delay (Seconds) V/C ≤ 1.0 | Level of Service V/C ≤ 1.0 | Level of Service V/C > 1.0 |
|---|---|---|---|
| Operations with very low delay occurring with favorable progression and/or short cycle length. | 0 to 10.00 | A | F |
| Operations with low delay occurring with good progression and/or short cycle lengths. | 10.01 to 20.00 | B | F |
| Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear. | 20.01 to 35.00 | C | F |
| Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable. | 35.01 to 55.00 | D | F |
| Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay. | 55.01 to 80.00 | E | F |
| Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths | 80.01 and up | F | F |

*Source: City of Rancho Mirage General Plan Update, Traffic Impact Analysis, Table 2-1, Urban Crossroads, September 2017.*

### *Unsignalized Intersections*

The City requires that operations of unsignalized intersections be evaluated using the methodology described in Chapter 19, Chapter 20, and Chapter 32 of the HCM 2010. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle as shown in **Table 4.13.4, *Unsignalized Intersection Description of LOS***.

**Table 4.13.4 Unsignalized Intersection Description of LOS**

| Description | Average Control Delay Per Vehicle (Seconds) | Level of Service, V/C ≤ 1.0 | Level of Service, V/C > 1.0 |
|---|---|---|---|
| Little or no delays | 0 to 10.00 | A | F |
| Short traffic delays | 10.01 to 15.00 | B | F |
| Average traffic delays | 15.01 to 25.00 | C | F |
| Long traffic delays | 25.01 to 35.00 | D | F |
| Very long traffic delays | 35.01 to 50.00 | E | F |
| Extreme traffic delays with intersection capacity exceeded | > 50.00 | F | F |

*Source: City of Rancho Mirage General Plan Update, Traffic Impact Analysis, Table 2-2, Urban Crossroads, September 2017.*

### *Required Intersection Level of Service*

Per City traffic study guidelines found in the City of Rancho Mirage General Plan Update, Traffic Impact Analysis (March 2017,) the city has adopted LOS "D" as the minimum acceptable standard for intersection analysis. **Table 4.13.5, R*equired Intersection Levels of Service,*** shows the LOS criteria used in the analysis of the project.

**Table 4.13.5 Required Intersection Levels of Service**

| Intersection Type | LOS Criteria |
|---|---|
| Signalized Intersection or All-Way Stop Controlled Intersection | LOS D or better |
| Cross-Street Stop Controlled Intersection | LOS E or better for the side street |

*Source: City of Rancho Mirage General Plan Update, Traffic Impact Analysis, Table 2-2, Urban Crossroads, September 2017.*

### *Data Collection*

Existing AM peak period (7:00 – 9:00 AM) and PM peak period (4:00 – 6:00 PM) traffic volume turning movement counts for the study intersections were collected on Wednesday, April 1, 2020. The existing (2020) counts were proportionally increased to account for changes in travel patterns due to the Covid-19 pandemic, as shown in Attachment A of the TAM (Appendix H of this EIR) for Count Data Adjustment Summary Tables, summarized subsequently. Please note that all traffic counts were collected when the local Tennis Tournament was not occurring, in order to provide a typical high-season baseline.

Counts collected on March 22, 2018 at two nearby intersections were compared to 2020 counts at the same locations. The intersections of Bob Hope Drive at Country Club Drive and Monterey Avenue at SR-111 were evaluated. Between 2018 and 2020, there was approximately a 50% decrease in traffic volumes during the AM peak hour and approximately a 60% decrease in traffic volumes during the PM peak hour.

Daily roadway segment volumes along Mirage Road and Magnesia Falls near the project were also evaluated using traffic counts collected on March 19, 2019 and April 1, 2020. Between 2019 and 2020, there was approximately a 30% decrease in traffic volumes during that AM peak hour and approximately a 50% decrease in volumes during the PM peak hour.

In order to provide a conservative estimate for baseline traffic conditions, the following adjustments were applied to the Existing (2020) intersection turning movement volumes:

- SR-111
    - 55% increase during the AM peak hour
    - 65% increase during the PM peak hour
- Neighborhood Roadway (Mirage Road, Indian Trail, Sahara Road, Rancho Las Palmas Drive, Ocotillo Drive)
    - 35% increase during the AM peak hour
    - 55% increase during the PM peak hour

A 24-hour count was also collected at the project's employee entrance to estimate the number of trips generated by the site's existing operations. Employees and deliveries use the entrance on Mirage Road while residents and guests use the main entrance on Dunes View Road. 182 trips were counted on March 19, 2019 at the service entrance (employees and deliveries). It should be noted that the majority of the service entrance trips occurred between 5:00-7:00 AM and 2:00-4:00 PM, which fall outside the typical peak hours.

### *Existing Intersection Level of Service*

Existing peak hour traffic operations were evaluated for the study area intersections as shown in **Table 4.13.6, *Intersection Analysis for Existing (2020) Conditions***. Existing peak hour traffic operations were evaluated for the study area intersections based on the analysis methodologies. The existing operations analysis results are summarized in Table 4.13.6 indicates that all 6 existing study area intersections are currently operating at an acceptable LOS during the peak hours, including the COVID-19 adjustments.

**4.13.6 Intersection Analysis for Existing (2020) Conditions**

| ID | Intersection | Traffic Control[1] | Delay (in seconds)[2] | | Level of Service[2] | |
|---|---|---|---|---|---|---|
| | | | AM | PM | AM | PM |
| 1 | SR-III and Mirage Road | SSSC | 15.0 | 21.0 | C | C |
| 2 | SR-III and Indian Trail | TS | 16.2 | 28.0 | B | C |
| 3 | Sahara Road and Dunes View Road | AWSC | 7.0 | 7.2 | A | A |
| 4 | SR-III and Rancho Las Palmas Drive | TS | 12.0 | 19.0 | B | B |
| 5 | Sahara Road and Ocotillo Drive | AWSC | 7.2 | 7.1 | A | A |
| 6 | SR-III and Magnesia Falls Drive | TS | 8.6 | 10.8 | A | B |

*Source: Porcupine Creek Transportation Assessment Memo, Table 4, Fehr & Peers, October 2020.*

Notes:

1. TS = Traffic Signal; SSSC = Side-Street Stop-Controlled; AWSC = All-Way Stop Control

2. Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with side street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10 analysis software. **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

### *Required Intersection Level of Service*

As mentioned previously, per City traffic study guidelines found in the City of Rancho Mirage General Plan Update, Traffic Impact Analysis (March 2017,) the city has adopted LOS "D" as the minimum acceptable standard for intersection analysis. **Table 4.13.5, R*equired Intersection Levels of Service,*** shows the LOS criteria used in the analysis of the project.

In addition, pursuant to the criteria outlined for the analysis of study area intersections using the HCM methodology, any signalized intersection could be considered impacted if the addition of project trips will result in the LOS for that intersection exceeding the criteria established by the City of Rancho Mirage.

Project improvements may include traffic control modification, or demand management measures; and may be achieved on a project by project basis by the fair-share payment of development impact fees

### *Project Trip Generation*

Trip generation rates from the Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017) were developed to estimate the number of trips associated with the project. The Porcupine Creek Retreat is a unique land use not perfectly represented by any of the hotel land use types in ITE. Fehr and Peers reviewed several different hotel types (General Hotel, All Suites Hotel, and Resort Hotel.) to determine an appropriate trip generation rate representative of the project. All Suites Hotel (ITE Code 311) was chosen to represent a conservative analysis as this ITE code provides the best available, and conservative, trip generation rate for the proposed project. This trip generation rate will result in a trip generation estimate that is conservative for what the project is anticipated to produce given the programming for guests is anticipated to retain guests on site for longer stays and substantially less daily trips to and from the property given the extensive dining, recreational, spa and related amenities. Using the General Hotel rates would have overstated the project's trip generation estimate because that rate fails to account for the all-inclusive and extended stay nature of the proposed Project, as well as the fact that the project amenities will not be open to the general public. While the Resort Hotel rate is lower than All-Suites Hotel (and a closer fit to the project), the data is not as complete as All-Suites Hotel as it does not provide a daily trip generation rate. It is anticipated that this trip generation rate will result in a trip generation estimate that is higher than what the project is anticipated to produce because guests at standard, all suites hotels come and go more frequently. The Trip generation estimates for the project are presented subsequently.

**Existing (2020) Conditions**: This Scenario represents the existing baseline condition of the project. Existing (2020) counts collected in the field were adjusted using 2019 counts collected in the area to

account for changes in travel patterns due to the Covid-19 pandemic. Existing lane geometries and adjusted volumes were used to evaluate Existing (2020) Conditions.

### *Analysis Scenarios*

In accordance with the City of Rancho Mirage *Traffic Study Guidelines* and consultation with the City, the TIA analyzed the following scenarios:

1. Existing (2020) Conditions: This Scenario represents the existing baseline condition of the project. Existing (2020) counts collected in the field were adjusted using 2019 counts collected in the area to account for changes in travel patterns due to the Covid-19 pandemic. Existing lane geometries and adjusted volumes were used to evaluate Existing (2020) Conditions.
2. Existing (2020) Plus Project Conditions: Project traffic generated by the buildout of the project was added to Existing (2020) Conditions to evaluate Existing (2020) Plus Project conditions.
3. Opening Year/Buildout (2023) No Project Conditions: This scenario projects future traffic growth and operating conditions that are expected to result from local and regional background growth near the project site by year 2023[2]. An ambient growth rate of two percent (2%) was applied to the Existing 2020 scenario.
4. Opening Year/Buildout (2023) Plus Project Conditions: Project traffic generated by the project was added to the Opening Year/Buildout (2023) traffic volumes to evaluate Opening Year/Buildout (2023) Plus Project Conditions.

## Project Design Features

Available data to determine the potential for impacts associated with traffic and transportation was assessed based upon the consideration of the project. Project design features regarding transportation is provided in the following discussions.

## Project Impact

### *a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?*

The project includes the renovation and repurposing of a private estate to an exclusive, six-star retreat with up to 50 guest units. The existing main house, casitas and villas are proposed to be converted to hotel units and 27 new units are proposed.

The proposed retreat is anticipated to host guests for all-inclusive extended stays (several days) with extensive recreational, spa and wellness amenities onsite. In addition to adding lodging units onsite, the

[2] 2023 was selected as the earliest year the project can realistically be expected to reach full occupancy, even though the retreat may open for commercial operations as early as the end of 2021.

project will also include renovations of a clubhouse, dining deck, spa complex, and 18-hole golf course, as well as a new restaurant and other retreat related facilities. These facilities will only be accessible to guests of the retreat, and not the general public. The project will result in a relatively modest increase in the development onsite, which will be contained within the current development footprint.

The existing site currently operates very similarly to an active hotel. It currently uses an estimated 84 Full Time Equivalent (FTE) employees, or approximately 60 employees per day, to manage the on-site golf course, housekeeping and maintenance, food and beverage, spa, groundskeeping and administration. An additional 63 Full Time Equivalent (FTE) employees are anticipated, or 45 per day, with the expansion of 27 new units and conversion from private estate to commercial retreat.

The transportation assessment was conducted for consistency with the City of Rancho Mirage General Plan and to evaluate the proposed project's effect on the surrounding transportation network.

Trip generation rates used to estimate project traffic and a summary of the project's trip generation are shown in **Table 4.13.8, *Project Trip Generation Summary***. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) All Suites Hotel for (ITE Land Use Code 311) land use in their published *Trip Generation Manual*, 10th Edition, 2017.

As shown on **Table 4.13.8**, the proposed project is anticipated to generate a net total of approximately 168 trip-ends per day on a typical weekday with approximately 19 trips (12 inbound/7 outbound) vehicles per hour during the AM peak hour and approximately 17 trips (8 inbound/9 outbound) vehicles per hour during the PM peak hour. These trips include guest trips, airport shuttle trips, employee trips, deliveries, and other ancillary or operational trips.

The assignment of traffic from the project study area to the adjoining roadway system was based on project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by buildout of the project (Year 2023). Based on the project's generation and trip distribution patterns, project average daily trips (ADT) were identified, as shown in **Table 4.13.8**.

## Project Trip Distribution

According to the TAM, trip distribution for the project was determined using engineering judgment and general knowledge of the study area. Based on the trip generation and trip distribution, estimates were developed, the project's trips were assigned to the study area roadway network. The TAM estimates that 30% of the project's trips will travel to and from the project, west on HWY 111. 50% of project trips would travel to and from the project, east along HWY 111. 20% of these trips will travel north on Bob Hope Drive. 30% of trips would travel east, to and from the project, on HWY 111 and continue east of Bob Hope Drive. Since there are no major roadway improvements anticipated in the study area, the assignment for Existing and Opening Year conditions are the same. See **Exhibit 4.13.2, *Trip Distribution*.**

## Analysis Scenarios

1. **Existing (2020) Conditions:** As discussed previously, this scenario represents the existing baseline condition of the project. Existing (2020) counts collected in the field were adjusted using 2019 counts collected in the area to account for changes in travel patterns due to the Covid-19 pandemic. Existing lane geometries and adjusted volumes were used to evaluate Existing (2020) Conditions.

2. **Existing (2020) Plus Project Conditions:** Project traffic generated by the buildout of the project was added to Existing (2020) Conditions to evaluate Existing (2020) Plus Project conditions.

Under this scenario the TAM evaluated impacts on intersections for Existing conditions plus project trips.

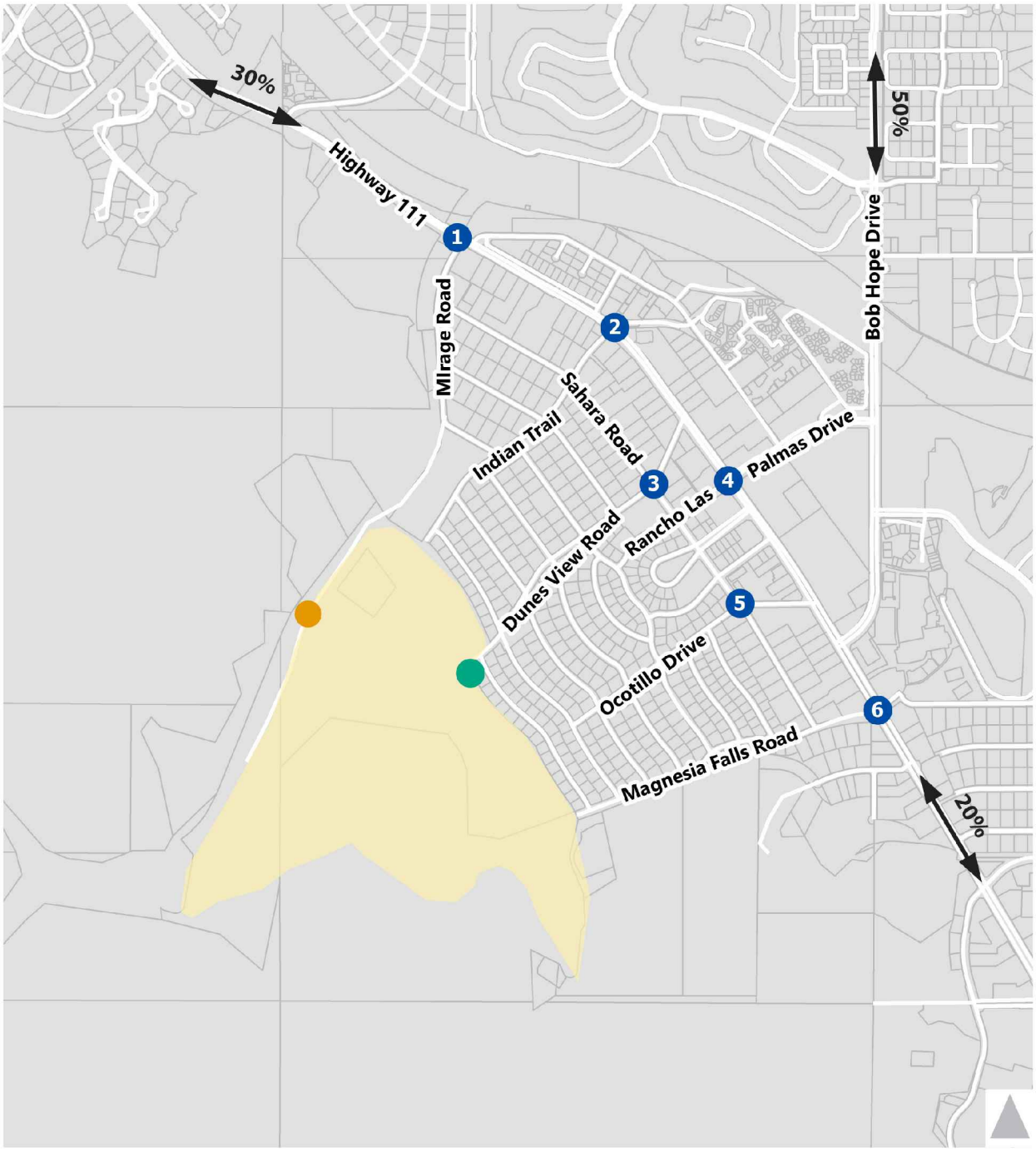
**Table 4.13.8 Project Trip Generation Summary**

| Trip Generation Rates[1] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | ITE Code | Units[2] | AM Peak Hour | | | PM Peak Hour | | | Daily |
| | | | In | Out | Total | In | Out | Total | |
| All Suites Hotel | 311 | Rooms | 67% | 33% | 0.48 | 43% | 57% | 0.52 | 6.24 |
| | | | | | | | | | |
| **Trip Generation Results** | | | | | | | | | |
| Land Use | ITE Code | Quantity[2] | AM Peak Hour | | | PM Peak Hour | | | Daily |
| | | | In | Out | Total | In | Out | Total | |
| All Suites Hotel | 311 | 50 Keys | 16 | 8 | 24 | 11 | 15 | 26 | 312 |
| Existing Employee/Delivery Trips | | – | (4) | (1) | (5) | (3) | (6) | (9) | (144) |
| **Net New Project Trips** | | | **12** | **7** | **19** | **8** | **9** | **17** | **168** |

*Source: Porcupine Creek Transportation Assessment Memo, Tables 2 and 3, Fehr & Peers, October 2020.*

Notes:

1. Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).




Employee Entrance

Guest Entrance

Study Intersection

Project Site

NORTH

N.T.S.

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# PROJECT TRIP DISTRIBUTION

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.13.2*

The results of the analysis for Existing (2020) Plus Project conditions are shown in **Table 4.13.9, *Intersection Analysis for Opening Year Plus Project Conditions*.** As shown, all intersections would operate at acceptable LOS with or without the project.

**4.13.9 Intersection Analysis for Existing (2020) Plus Project Conditions**

| ID | Intersection | Traffic Control[1] | Delay (in seconds)[2] | | Level of Service[2] | |
|---|---|---|---|---|---|---|
| | | | AM | PM | AM | PM |
| 1 | SR-III and Mirage Road | SSSC | 15.7 | 24.1 | C | C |
| 2 | SR-III and Indian Trail | TS | 16.8 | 29.0 | B | C |
| 3 | Sahara Road and Dunes View Road | AWSC | 7.1 | 7.3 | A | A |
| 4 | SR-III and Rancho Las Palmas Drive | TS | 12.6 | 20.6 | B | C |
| 5 | Sahara Road and Ocotillo Drive | AWSC | 7.2 | 7.3 | A | A |
| 6 | SR-III and Magnesia Falls Drive | TS | 9.1 | 11.7 | A | B |

*Source: Porcupine Creek Transportation Assessment Memo, Table 4, Fehr & Peers, October 2020.*

1. TS = Traffic Signal; SSSC = Side-Street Stop-Controlled; AWSC = All-Way Stop Control
2. Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with side street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10 analysis software. **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

3. **Opening Year/Buildout (2023) Conditions:** This scenario projects future traffic growth and operating conditions that are expected to result from local and regional background growth near the project site by year 2023. An ambient growth rate of two percent (2%) in the study area was applied to the Existing 2020 scenario.

According to the TAM, estimates of future traffic volumes in the project study area both with and without project traffic were developed. An annual growth factor of two percent (2.0%) per year was applied to traffic counts to develop opening year baseline conditions. There are no roadway improvements assumed between existing year and opening year conditions. Therefore, the lane configurations and signal timing in both scenarios are the same.

Cumulative development projects anticipated to be in operation by 2023 were included in the traffic forecasts. Trip generation rates and estimates for related projects are shown in **Table 4.13.8** and **Table 4.13.9**. Trips generated by the related projects were added to the opening year baseline conditions to develop the Opening Year/Buildout (2023) No Project volumes shown in **Table 4.13.10**.

**4.13.10 Intersection Analysis for Opening Year/Buildout (2023)**

| ID | Intersection | Traffic Control[1] | Delay (in seconds)[2] | | Level of Service[2] | |
|---|---|---|---|---|---|---|
| | | | AM | PM | AM | PM |
| 1 | SR-III and Mirage Road | SSSC | 15.6 | 23.4 | C | C |
| 2 | SR-III and Indian Trail | TS | 16.6 | 28.8 | B | C |
| 3 | Sahara Road and Dunes View Road | AWSC | 7.1 | 7.3 | A | A |
| 4 | SR-III and Rancho Las Palmas Drive | TS | 12.4 | 20.3 | B | C |
| 5 | Sahara Road and Ocotillo Drive | AWSC | 7.2 | 7.3 | A | A |
| 6 | SR-III and Magnesia Falls Drive | TS | 9.0 | 11.6 | A | B |

*Source: Porcupine Creek Transportation Assessment Memo, Table 7, Fehr & Peers, October, 2020.*

1. TS = Traffic Signal; SSSC = Side-Street Stop-Controlled; AWSC = All-Way Stop Control
2. Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with side street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 10 analysis software. **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
   **Bold** = LOS does not meet the applicable jurisdictional requirements (i.e. unacceptable LOS)

4. **Opening Year/Buildout (2023) Plus Project Conditions:** Project traffic generated by the Project was added to the Opening Year/Buildout (2023) traffic volumes to evaluate Opening Year/Buildout (2023) Plus Project Conditions.

This scenario represents the most realistic approach to the analysis of project traffic because it takes into account ambient growth along with project traffic in 2023. LOS calculations were conducted for the study intersections to evaluate their operations under (2023) traffic conditions. The intersection analysis results are summarized in **Table 4.13.11, *Intersection Analysis for Existing Plus Ambient Plus Project (2023) Conditions*.**

**4.13.11 Intersection Analysis for Opening Year/Buildout (2023) Plus Project Conditions**

| ID | Intersection | Traffic Control[1] | Delay (in seconds)[2] | | Level of Service[2] | |
|---|---|---|---|---|---|---|
| | | | AM | PM | AM | PM |
| 1 | SR-III and Mirage Road | SSSC | 15.7 | 24.1 | C | C |
| 2 | SR-III and Indian Trail | TS | 16.8 | 29.0 | B | C |
| 3 | Sahara Road and Dunes View Road | AWSC | 7.1 | 7.3 | A | A |
| 4 | SR-III and Rancho Las Palmas Drive | TS | 12.6 | 20.6 | B | C |
| 5 | Sahara Road and Ocotillo Drive | AWSC | 7.2 | 7.3 | A | A |
| 6 | SR-III and Magnesia Falls Drive | TS | 9.1 | 11.7 | A | B |

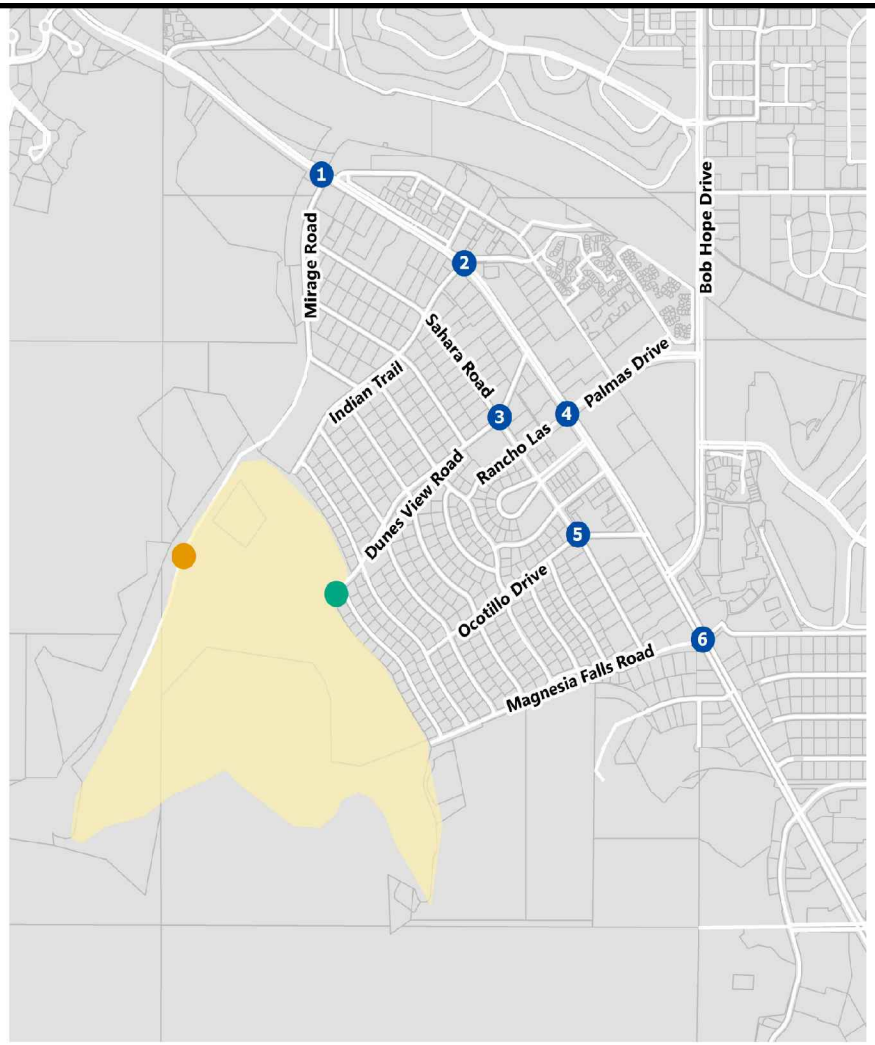
*Source: Porcupine Creek Transportation Assessment Memo, Table 7, Fehr & Peers, October 2020.*

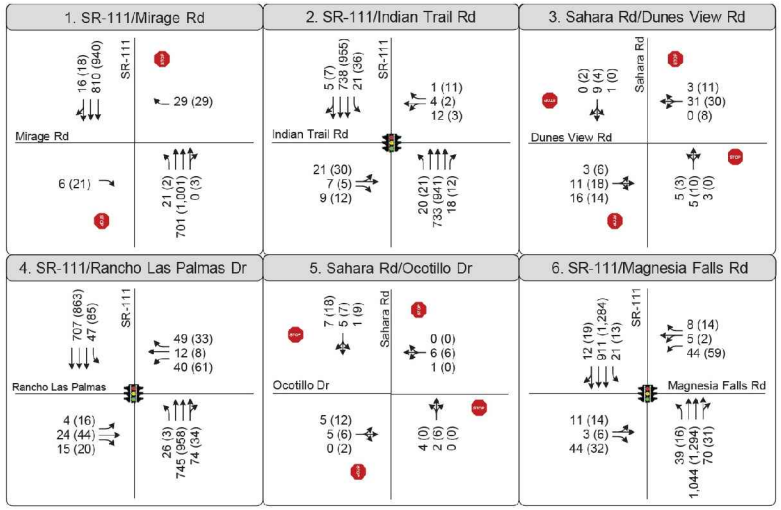
The table indicates that no study area intersections are anticipated to exceed recommended LOS for roadway intersections.

As shown in **Table 4.13.11**, all study intersections in Opening Year and Opening Year Plus Project Conditions operate at a LOS C or better. Consistent with the Existing Conditions, the delay in the Plus

Project conditions are similar to the No Project conditions and the project does not degrade the LOS at any of the study intersections.

The project is unique given the conversion from one use to another. For informational purposes to provide a conservative measurement, the project analysis was also conducted without applying any existing use credits to the proposed trip generation estimates. This approach provides information on intersection operations under the scenario that a 50-key all-suites hotel project was proposed on a vacant site. This analysis is provided in **Attachment C** of the TAM, (Appendix H of this EIR) and results in approximately the same conclusions; each study intersection would still operate at LOS C or better without applying any trip reduction credits for the existing use.




AM Peak Hour (PM Peak Hour)

Study Intersection
Project Site
Employee Entrance
Guest Entrance

NORTH
N.T.S.

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# TRAFFIC VOLUMES AND LANE CONFIGURATIONS OPENING YEAR (2023) PLUS PROJECT CONDITIONS

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.13.3*

## Cumulative Growth Traffic

Cumulative development projects anticipated to be in operation by project opening/full buildout year 2023 were included in the traffic forecasts. Trip generation rates and estimates for related projects are shown in **Table 4.13.12** and **Table 4.13.13**. Trips generated by the related project were added to the opening year baseline conditions to develop the Opening Year/Buildout (2023) No Project volumes**.** Project trips forecast for the project were applied to the Opening Year Plus Related Projects volumes.

**Table 4.13.12 Cumulative Development Trip Generation Rates**

| Project Name | Land Use | Land Use Code | Units[1] | Trip Generation Rates[1] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AM Peak Hour | | | PM Peak Hour | | | Daily |
| | | | | In | Out | Total | In | Out | Total | |
| Carefield Senior Living | Assisted Living | 254 | KSF | 78% | 22% | 0.39 | 30% | 70% | 0.48 | 4.19 |
| Venetio | Multi-Family (Mid Rise) | 221 | DU | 26% | 74% | 0.36 | 61% | 39% | 0.44 | 5.44 |
| Revelle @ Clancy | Single Family | 210 | DU | 28% | 72% | 0.30 | 70% | 30% | 0.36 | 3.44 |
| Bella Clancy – Ranch Palmeras | Single Family | 210 | DU | 28% | 72% | 0.30 | 70% | 30% | 0.36 | 3.44 |
| Chase Bank | Drive-Thru Bank | 912 | KSF | 58% | 42% | 9.50 | 50% | 50% | 20.45 | 100.3 |

*Source: Porcupine Creek Specific Plan Transportation Assessment Memo, Table 5, Fehr & Peers, October 2020.*
Notes:

1. DU = Dwelling Units; KSF = Thousand Square Feet

Source: Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017

**Table 4.13.13 Cumulative Development Trip Generation Summary**

| Project Name | Land Use | Land Use Code | Units[1] | Daily | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | In | Out | Total | In | Out | Total |
| Carefield Senior Living | Assisted Living | 254 | KSF | 335 | 24 | 7 | 31 | 11 | 27 | 38 |
| Venetio | Multi-Family (Mid Rise) | 221 | DU | 185 | 3 | 9 | 12 | 9 | 6 | 15 |
| Revelle @ Clancy | Single Family | 210 | DU | 302 | 6 | 18 | 24 | 20 | 12 | 32 |
| Bella Clancy – Ranch Palmeras | Single Family | 210 | DU | 189 | 4 | 11 | 15 | 13 | 7 | 20 |
| Chase Bank | Drive-Thru Bank | 912 | KSF | 348 | 19 | 14 | 33 | 36 | 36 | 71 |
| **Total Trips** | | | | **1,359** | **56** | **59** | **115** | **89** | **88** | **176** |

*Source: Porcupine Creek Specific Plan Transportation Assessment Memo, Table 6, Fehr & Peers, October 2020.*
Notes:

1. DU = Dwelling Units; KSF = Thousand Square Feet

Source: Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017

## Project Site Internal Circulation

### *Project Intersection Controls and Street Cross-Sections*

Two access points currently serve the project site: 1) The main entrance is located at the terminus of Dunes View Road. 2) The secondary entrance (for maintenance, staff and valet parking) is located at the northern corner of the property and the terminus of Mirage Road. All entrances to the project site will be gated. The internal road (main driveway) would intersect with Dunes View Road, while a service road would connect the main driveway with Mirage Road, reflective of the existing conditions.

**Exhibit 4.13.4, *Proposed On-Site Road Improvements*,** (SP) shows the proposed roadway lane improvements for the Specific Plan main roads through the site.

Construction of on-site improvements would occur in conjunction with adjacent project development activity or as needed for project access purposes. These improvements would be in place prior to occupancy. No offsite roadway improvements are required

Where necessary, the terminus of roadways providing site access will be constructed consistent with/within the recommended roadway classifications in the City of Rancho Mirage General Plan Circulation Element.

## Alternative Transportation

### *Transit Service*

The City of Rancho Mirage is currently served by the SunLine Transit Agency. Transit service is reviewed and updated by the SunLine Transit Agency periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. The projected increase of 63 FTE employees is not expected to adversely impact existing Transit service.

### *Non-Automotive Assessment*

Fehr & Peers evaluated the project effect on non-automotive modes. A significant impact would be caused by the project if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities. After reviewing the City of Rancho Mirage General Plan 2017 Update[3] and the CVAG Active

[3] City of Rancho Mirage General Plan 2017 Update: https://ranchomirageca.gov/wp-content/uploads/2019/01/rm-general-plan-17.pdf

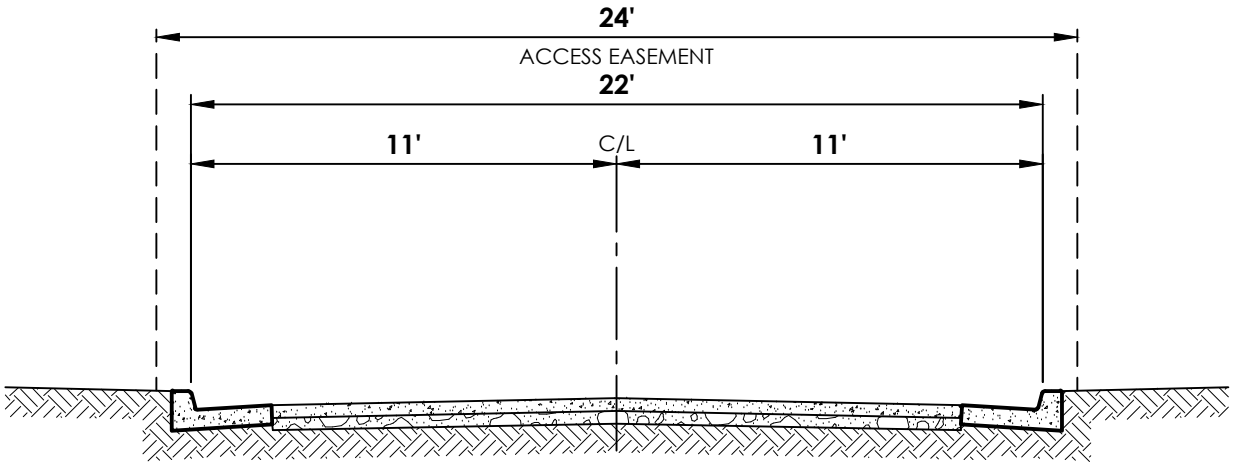
Transportation Plan[4], Fehr and Peers have concluded that the project is not interfering with any existing or proposed bike, pedestrian or transit facilities.

## Conclusions

The proposed Retreat is a partial remodel of an existing residential estate into a 50 key retreat, with a net increase of 27 units. Trip generation estimates for the project were evaluated by applying the All-Suites Hotel (ITE Code 311) rate since guests are expected stay on-site the majority of their extended stay. A conservative existing trip credit (20% below existing counts) was applied based on the employees and delivery trips that occur onsite on a regular basis. All study intersections operate at LOS C or better in each analysis scenario with the addition of project traffic. The project does not result in a degradation of LOS at any of the study intersections.

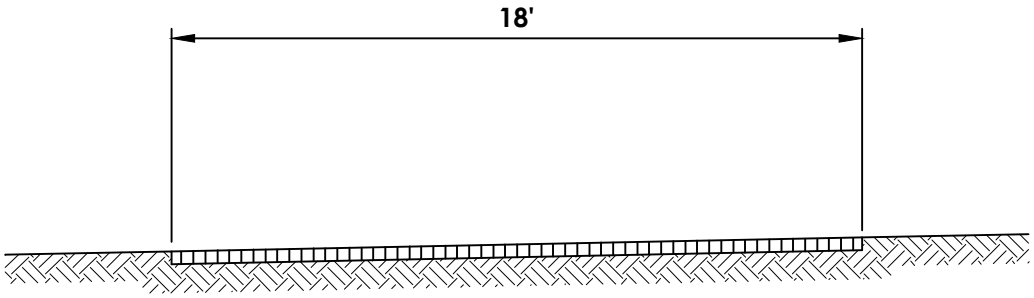
The project is anticipated to result in a less-than-significant transportation impact related to consistency with the General Plan and other applicable programs, plans, ordinances and policies. As no impacts are anticipated, no mitigation is required.

[4] CVAG Active Transportation Plan , June 2017
https://www.cvag.org/library/pdf_files/trans/Transportation_Documents/CVAG%20ATP%202016-06-20%20rev2017-06-07.pdf



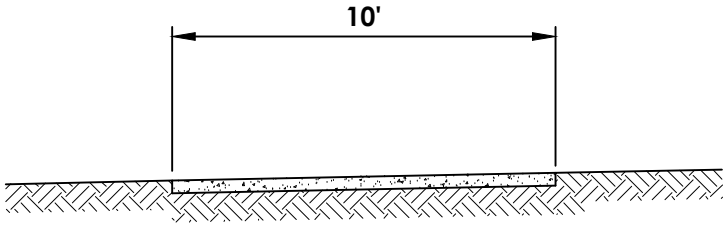

**PRIMARY VEHICULAR DRIVE**

**N.T.S.**




**SECONDARY VEHICULAR DRIVE**

**N.T.S.**




**GOLF / PEDESTRIAN PATH**

**N.T.S.**

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# PROPOSED ON-SITE ROAD IMPROVEMENTS

**PORCUPINE CREEK RETREAT**

ENVIRONMENTAL IMPACT REPORT

EXHIBIT

*4.13.4*

### *b. Conflict or be inconsistent with CEQA Guidelines sections 15064.3, subdivision (b)*

## Vehicle Miles Travelled (VMT)

Vehicle Miles Travelled is a measure of the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. The analysis of Vehicle Miles Traveled (VMT) (SB743) attributable to a project in CEQA went into full effect statewide on July 1, 2020. According to the Governor's office of Planning and Research (OPR) proposed CEQA Guideline Implementing SB 743, projects that decrease vehicle miles traveled in a project area compared to existing conditions should be considered to have a less than significant transportation impact. The California Air Pollution Control Officers Association (CAPCOA) publishes a resource for Local Government to assess emission reductions from Greenhouse Gas Mitigation Measures. The CAPCOA report recognizes that land use planning provides the best opportunity to influence GHG emissions through a reduction in overall VMT.

According to the National Center for Sustainable Transportation, a number of cities, regions and states across the United States have begun to deemphasize vehicle delay metrics such as LOS. In their place, policymakers are considering alternative transportation impact metrics that more closely approximate the true environmental impacts of driving. VMT is one metric that is increasingly being utilized.

Goals for reducing Greenhouse Gasses (GHG) have been the primary motivation for the shift to VMT measures. Reductions in VMT produce many other potential benefits such as reductions in other air pollutant emissions, water pollution, wildlife mortality and traffic congestion, as well as improvements in safety and health and savings in public and private costs.

### *Vehicle Miles Travelled (VMT) Assessment*

According to the TAM, a Vehicle Miles Traveled (VMT) assessment was performed for the project consistent with the Rancho Mirage's Transportation Analysis Policy (Policy) which was adopted in June 2020. According to *Table 1* of the Policy, retail project types (including hotel) would result in a significant impact if the project caused a net increase in the total existing VMT for the region. The analysis utilizes the Riverside Transportation Analysis Model (RIVTAM), consistent with the Policy.

### *Vehicle Miles Travelled (VMT) Methodology*

RIVTAM was run for the "with project" and "without project" scenarios using the latest version of the model. The following modeling parameters, consistent with the model documentation were used in the assessment:

- The RIVTAM roadway network and land use data sets were updated to be consistent with the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan and

Sustainable Communities Strategy (RTP/SCS) with a base year of 2012 and future year of 2040[5]

- RIVTAM assignment parameters were set to run up-to five loops with a minimum convergence criteria[6] of 0.01
- The population and employment inputs were updated in the Socio-Economic Data (SED), truck and CVAG module input files to represent the project
- RIVTAM model runs included the CVAG module enabled
- The model Origin-Destination (OD) output trip generation was adjusted[7] to match the trip generation estimate.

### *Boundary Method*

The methodology used to estimate a net change in regional VMT is referred to as the Boundary Method and is consistent with the City's identified methodology for retail uses (including hotels). This methodology aggregates all model link distances within the specified boundary and multiplies those distances by their forecasted daily traffic volumes on the link.

When reviewing boundary method results, two key considerations need to be addressed:

- Boundary size – if the boundary size is too small, then the analysis may not be accounting for the full effects of the project on VMT. Conversely, if the boundary is too big, then model noise[8] is captured in the VMT estimates and may cloud the effect of the project on VMT. Additionally, if the boundary is too big, then it is difficult to identify the change in VMT since individual projects change total VMT in the model very slightly. It has been our experience that using the City Boundary or the sub-regional boundary provides the appropriate combination of boundary size that is large enough to capture the project effect on VMT while not being so large that model noise occurring long distances from the site cloud the VMT effects of the project.
- Population and employment control totals – If the project is incorporated into the model by adding the land use on top of the SED data already included in the model, then total VMT must be divided by the population and employment to "normalize" the effect of the project when

[5] Please note that SCAG is currently in the process of adopting the 2020 RTP/SCS; however, since it has not yet been adopted, that data is not available yet for use in this assessment.

[6] Convergence criteria refers to the acceptable difference in the traffic volumes produced by different loops of the vehicle assignment. A convergence criteria of 0.01 indicates that the model is producing similar outputs with an allowance of 1% difference between each loop. This criteria is outlined in the model documentation as the recommended convergence criteria for the model.

[7] This adjustment ensures that the model is assigning trips to/from the project consistent with the estimated trip generation identified in the traffic report.

[8] The RIVTAM model can result in traffic assignment variations between model runs in areas far from the applied model modifications due to the iterations of traffic distribution during model assignment loops. This is referred to as "model noise." An example of model noise would be adding ten homes to the City of Rancho Mirage and seeing traffic volumes change on numerous roadways in Imperial County, Los Angeles County, and Orange County.

doing “no project” to “with project” comparisons.

Fehr and Peers estimated VMT for the City and the CVAG region to measure the project effect on VMT.

Estimates were performed for base and future year and linearly interpolated to estimate the baseline 2020 scenario. Consistent with the Office of Planning and Research’s (OPR’s) Technical Advisory, total VMT and VMT per service population[9] is shown for comparative purposes.

### *Model Inputs*

The RIVTAM model inputs are based on population and employment totals. The approximate daily employment for the project was input into the Traffic Analysis Zone (TAZ) that represents the project location. The project estimates approximately 63 net new Full Time Equivalent (FTE) employees or approximately 45 net new employees each weekday will work on-site. The SED for the project TAZ and surrounding regions used in the analysis is shown in **Table 4.13.14**. The RIVTAM growth assumptions from year 2012 to 2040 in the project TAZ include more employees than are estimated for the project, therefore it is assumed that the cumulative year SED assumes employment growth consistent with the project in place and additional employment was not added to the TAZ. Detailed RIVTAM input defaults and assumptions are provided in **Attachment D** of the TAM in **Appendix H.**

**Table 4.13.14 RIVTAM Model Input Assumptions**

| Model Scenario | Project TAZ | | | Rancho Mirage | | | CVAG | | |
|---|---|---|---|---|---|---|---|---|---|
| | Pop | Emp | SP | Pop | Emp | SP | Pop | Emp | SP |
| Base Year (2012) No Project | 102 | 67 | 169 | 18,837 | 12,363 | 31,200 | 454,979 | 152,973 | 607,952 |
| Base Year (2012) With Project | 102 | 112 | 214 | 18,837 | 12,408 | 31,245 | 454,979 | 153,018 | 607,997 |
| Project Baseline (2020) No Project | 66 | 156 | 222 | 12,623 | 10,914 | 23,537 | 336,292 | 131,409 | 467,701 |
| Project Baseline (2020) With Project | 66 | 169 | 235 | 12,623 | 10,927 | 23,549 | 336,292 | 131,421 | 467,714 |
| Future Year (2040) No Project | 129 | 478 | 607 | 25,342 | 25,836 | 51,178 | 722,044 | 306,957 | 1,029,001 |
| Future Year (2040) With Project | 129 | 478 | 607 | 25,342 | 25,836 | 51,178 | 722,044 | 306,957 | 1,029,001 |

Notes:
1. The project is located in RIVTAM TAZ 4627.
2. Pop = population of residents within TAZ or region. Emp = employment or jobs within a TAZ or region. SP = service population (population and employment) within a TAZ or region.
3. 2020 inputs are estimates based on interpolation between 2012 and 2040 data.
*Source: Riverside Transportation Analysis Model (RIVTAM).*

### *Regional VMT Estimates*

VMT for the comparable regions is summarized in **Table 4.13.15**. As shown, VMT slightly increases throughout each region in the base year model runs with the increased employment included in the model. VMT increases by approximately 0.016% within the City boundary, 0.005% within the CVAG boundary. This increase is expected with any increase in population or employment in a region which is

[9] The sum of the population and employment within an area is known as the service population.

why it is recommended to normalize VMT by the service population. When comparing the VMT per service population across the various regions, there are decreases within the Rancho Mirage boundary and there is no significant change within the CVAG boundary.

**Table 4.13.15 Regional Daily VMT Estimates**

| Year | Rancho Mirage | | | | CVAG | | | |
|---|---|---|---|---|---|---|---|---|
| | No Project | | With Project | | No Project | | With Project | |
| | VMT | VMT/ SP | VMT | VMT/ SP | VMT | VMT/ SP | VMT | VMT/ SP |
| 2012 | 667,895 | 21.41 | 668,000 | 21.38 | 13,079,970 | 21.52 | 13,080,560 | 21.51 |
| 2020 | 758,958 | 20.56 | 759,033 | 20.54 | 15,793,068 | 21.69 | 15,793,489 | 21.69 |
| 2040 | 986,616 | 19.28 | 986,616 | 19.28 | 22,575,813 | 21.94 | 22,575,813 | 21.94 |

Notes:
1. The employment growth within the project TAZ from base to future year is larger than the Project employment growth. Therefore, it is assumed that the Project growth is accounted for in the cumulative conditions land use and future year 2040 model run.
*Source: Fehr & Peers, 2020.*

## Conclusions

The proposed Retreat is a partial remodel of an existing residential estate with a net increase of 27 units. Trip generation estimates for the project were evaluated by applying the All-Suites Hotel (ITE Code 311) rate since guests are expected stay on-site the majority of their extended stay. A conservative existing trip credit (20% below existing counts) was applied based on the employees and delivery trips that occur on-site on a regular basis. All study intersections operate at LOS C or better in each analysis scenario with the addition of project traffic. The project does not result in a degradation of LOS at any of the study intersections. The VMT per service population is expected to decrease within the City of Rancho Mirage and is not expected to increase in a significant way in the greater region.

The project is anticipated to result in a less-than-significant transportation impact related to VMT. Therefore, the project is not anticipated to impact the project's surrounding transportation network. No impacts are anticipated, and no mitigation is required.

### *c. Increase hazards due to a geometric design feature or incompatible uses*

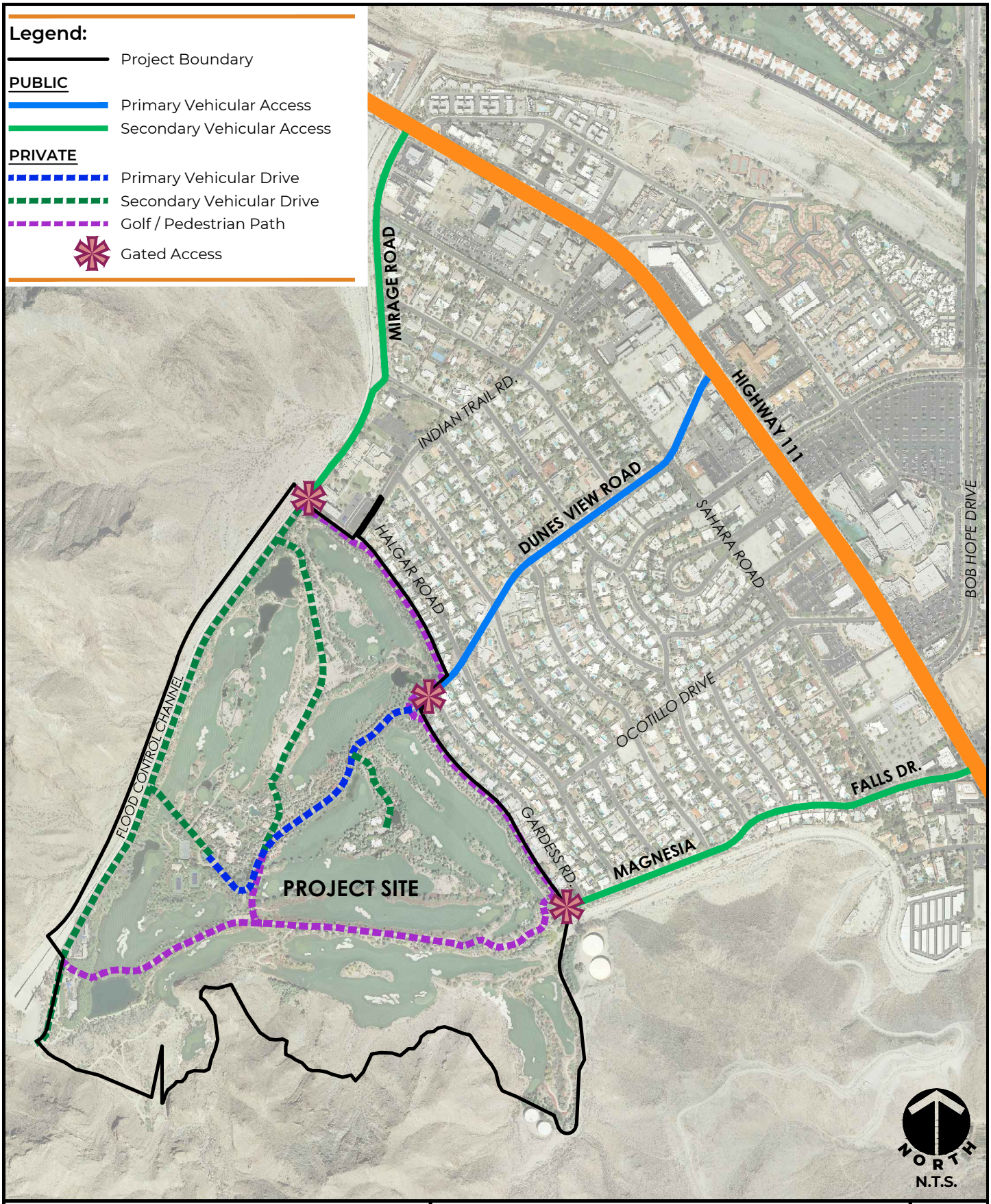
As shown in **Exhibit 3.12 in Chapter 3.0 *Project Description***, the proposed project will be developed as a private gated Retreat with gates at Dunes View Road for guests and at Mirage Road for staff and deliveries. The proposed Retreat is accessed by a system of local streets. The project's circulation system currently consists of an interior network of private driveways with a central spine road leading from the Guest Entrance at Dunes View Road. These low traffic driveways also accommodate pedestrian and golf cart circulation. These roads currently provide access to the primary residence.

The proposed project will expand the existing on-site roadway system. Project guests will arrive via vehicle at the main entrance. Private vehicles will be collected by a valet on arrival. Guests will then be shuttled to and from accommodations via golf cart. Parking will be provided (within the gated property) along the access road (Entrance at Mirage Road) along the Magnesia North flood channel for staff,

ground and maintenance employees as well as guest vehicles. Pedestrian circulation is provided within the project's private driveways and golf cart paths. See **Exhibit 4.13.5, *Conceptual Circulation Plan*.**

The Primary Vehicular Drive consists of a 24' access easement and a paved surface of 22'. Secondary Vehicular Drives consist of 18' of stabilized roadway. Golf/Pedestrian Paths are prosed to consist of 10' stabilized pathways.

The interior drives will be designed to the applicable accessway standards. Therefore, no hazards due to design features will occur.

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# CONCEPTUAL CIRCULATION PLAN

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
*4.13.5*

### *d. Result in Inadequate Emergency Access*

The project site is located adjacent to an existing residential community to the east. The remainder of the property is surrounded by mountain ranges associated with the Santa Rosa Mountains. There are currently three gated access points that serve the property.

Under the Porcupine Creek Retreat Specific Plan, access to the project site will continue to be provided through existing gates at the center of the western boundary for Guests (Dunes View Road) and at the northern corner of the property (Mirage Road.)

At such times as an alternative exit is required (e.g. fire or flood event), the project gates on Dunes View Road and Mirage Road will be opened and remain open until evacuation of the area is completed.

City staff, including police and fire department staff will review the proposed site plan. With implementation of existing and proposed project design features, impacts associated with the emergency access would be reduced to a less than significant impact.

## 4.13.5 Cumulative Impacts

Cumulative development projects anticipated to be in operation by project Opening Year/Buildout 2023 were included in the traffic forecasts. Trip generation rates and estimates for related projects are shown in **Table 4.13.12** and **Table 4.13.13**. Trips generated by the related project were added to the opening year baseline conditions to develop the Opening Year/Buildout (2023) No Project volumes**.** Project trips forecast for the project were applied to the Opening Year Plus Related Projects volumes.

## 4.13.6 Mitigation Measures Summary

No mitigation measures are required.

## 4.13.7 Level of Significance After Mitigation

The TAM concluded that the addition of Project traffic does not degrade any of the study intersections to a lower level of service (LOS) than in No Project Conditions in either analysis scenario. In all analysis periods, the study intersections operate at LOS C or better, which is above the City's minimum LOS standard of LOS D at signalized intersections. Implementation of the project will result in reduced Citywide VMT for service population and will not increase VMT at the regional level. Finally, the project will not affect the surrounding bicycle, pedestrian, and transit networks. Therefore, less than significant impacts are expected.

With implementation of existing regulations and standards, any potential impacts associated with traffic and transportation would be less than significant. Therefore, no project-specific or cumulatively considerable significant unavoidable adverse impacts relating to traffic and transportation have been identified.

## 4.13.8 Resources

1. *Porcupine Creek Retreat Transportation Assessment Memo* (TAM*),* prepared by Fehr and Peers, October 2020
2. The City of *Rancho Mirage General Plan Update (RMGPU) Circulation Element* and the *General Plan Update Traffic Impact Analysis* prepared by Urban Crossroads, March 2017

# 4.14 Tribal Cultural Resources

## 4.14.1 Introduction

This section discusses the Tribal Cultural Resources that may be present in the project site and assess potential impacts on these resources from future growth and development associated with the implementation of the proposed project. Descriptions and analysis in this section are based on information contained in the Porcupine Creek Cultural Resources Study prepared by Strategic Research, Inc. (SRI) (June 2020), the City of Rancho Mirage Comprehensive General Plan Chapter 5 Conservation and Open Space element, and the Native American Tribal Consultation undertaken by the City of Rancho Mirage, as required under Assembly Bill 52 (AB52) and Senate Bill 18 (SB18). This section discusses the cultural resources that may be present in the project site or in the vicinity and assesses impacts on these resources from the development associated with implementation of the Porcupine Creek Retreat Specific Plan. The cultural resources report is included in the Appendices of this Draft EIR. (**Appendix D** *Cultural Resource Study*)

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with Tribal Cultural resources at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR.

## 4.14.2 Existing Conditions

The project area is located along the southern edge of the Coachella Valley, a low valley sandwiched between the Santa Rosa Mountains to the south and southeast and the Little San Bernardino Mountains to the north. The valley is part of the Colorado Desert geomorphic province, an area that includes both sides of the lower Colorado River and the Coachella and Imperial Valleys of California (Jenkins 1980). The mountain ranges surrounding the Coachella Valley are uplifted blocks of continental crust. The Santa Rosa Mountains are located at the northern end of the Peninsular Ranges, a series of mountain ranges running from the Los Angeles Basin southeast to the tip of the Baja Peninsula (Jahns 1954:3) that forms a natural border between the coastal areas to the west and the deserts to the east. The mountains are composed of plutonic intrusions that have been uplifted through tectonic activity.

The highest point is San Jacinto Mountain, at 3,307 m (10,849 feet), which towers above the present-day City of Palm Springs. The Little San Bernardino Mountains are part of the Transverse Ranges, a series of east–west-trending mountains that are similar in composition to the Peninsular Ranges and include large masses of Mesozoic-era plutonic rocks. The summits of the Transverse Ranges exceed 3,500 m (11,483 feet) at San Gorgonio Peak (Bailey and Jahns 1954).

Much of the valley bottom is at or below sea level, with the deepest areas dipping to 80 m (263 feet) below sea level. The project area is situated at an elevation of approximately 110 m (360 feet) above mean sea level. Both alluvial and aeolian sediments are present within the valley.

As previously discussed, the project site has been previously disturbed, graded, and developed as residential estate and private golf course.

## Historical Resources

As discussed in the Cultural Resources section, the project-specific cultural report, no historical-period structures or other features are depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do not show any structures or other features in the project area. The 1941 Toro Peak, California, 15-minute USGS quadrangle shows a dirt road running through the project area to Magnesia Spring, but no structures are present. The 1957 Rancho Mirage, California, 7.5-minute USGS quadrangle shows a spot simply labeled “water” in the middle of the project area.

## Previously Identified Archaeological Resources

SRI surveyed all undeveloped portions of the project area, checked the locations of previously recorded resources within the developed portions of the project area, and checked the proposed development areas to confirm that these are highly disturbed from previous construction. All of the 79.5 acres of the three undeveloped areas were surveyed, and areas of open ground surface in the seven proposed development areas were checked as well. The seven development areas were covered extensively by vegetation and other landscaping. SRI determined from an analysis of aerial photographs and inspections of the visible ground surface; the entire area of the golf course has been extensively altered during construction. Any archaeological sites within the golf course would have been destroyed during its construction, and if any subsurface deposits were present, they were likely also destroyed.

The results of the records search and fieldwork performed by SRI identified thirteen previously recorded prehistoric archaeological sites in the overall project area. Six of these sites were not relocated. One of these six sites (RIV-3048) was previously recorded in a proposed development area, but this site was destroyed during construction of the golf course, and no other known cultural resources are located in the proposed development areas. The other five sites that could not be relocated were also destroyed by the construction of the golf course. SRI relocated and documented seven of the thirteen previously recorded sites. Each of these rerecorded sites consists of one or more stacked-rock cairns. These seven archaeological sites are all located on the margins of the property and will not be impacted by the proposed development. SRI recommends that these seven sites should be avoided. If development plans change and the sites will be impacted by the development, then they should be evaluated for listing in the CRHR.

## Native American Heritage Commission Sacred Lands File Search

Part of the records search and literature review involved contacting the Native American Heritage Commission (NAHC) for a list of traditional-use areas or sacred sites within the project area and a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. The NAHC Sacred Lands File search did not indicate the presence of Native American traditional cultural places within the project area. However, the NAHC provided a list of 19 contacts who could provide additional information on cultural resources within the project area. SRI sent a letter to all 19 contacts, describing the proposed project to solicit their input on the site. Seven tribes responded in writing, six of the tribes that responded had no further information to provide and did not identify the site as having cultural significance to their tribe. The Agua Caliente Band of Cahuilla Indians responded that the site was not located in their traditional boundaries but is found to be part of their Traditional Use Area (TUA). Therefore, they have requested all copies of the records search, cultural report and site records, and the presence of an approved Native American Cultural Resources Monitor.

## Assembly Bill 52

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. AB 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

Consultation between the local agency and Native American tribes must be conducted in a way that is mutually respectful of each party's sovereignty. Consultation must also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance. Consultation concludes when either: the parties agree on measures to mitigate or avoid significant impacts to Tribal Cultural Resources (TCR) or a party, in good faith and after reasonable effort, concludes that a mutual agreement cannot be reached.

On May 19, 2020, the City of Rancho Mirage sent letters regarding the proposed Porcupine Creek Retreat Specific Plan, to 19 tribes that have requested notification. AB 52 allows tribes 30 days after receiving notification to request consultation. However, as a result of the ongoing COVID- 19 pandemic, the Governor issued Executive Order N-54-20 signed on April 22, 2020, to extend tribal consultation under AB 52. The order acknowledges that tribal capacity to engage in or request consultation on land use projects is limited due to the pandemic and social distancing. The order placed a 60-day suspension on the AB 52 tribal consultation timeframes (April 23, 2020 to June 21, 2020). The City of Rancho Mirage suspended the 30-day review from April 23, 2020 to June 21, 2020 and the consultation period resumed on June 22, 2020 and ended on July 22, 2020.The letter to the tribes includes a short project description and an explanation of entitlements associated with the proposed project. The following tribes were contacted:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Missions Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Campo Band of Mission Indians
- Ewiaapaayp Tribal Office
- Jamul Indian Village
- La Posta Band of Mission Indians
- Los Coyotes Band of Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Ramona Band of Cahuilla Mission Indians
- Santa Rosa Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians
- Morongo Band of Mission Indians
- Soboba Band of Luiseno Indians
- Quechan Tribe of the Fort Yuma Indian

If a response is not received within the allotted 30 days, it is assumed that consultation has been concluded. To date, one response has been received from the Quechan Indian tribe. They did not wish to comment and deferred their support to local tribes. Moreover, government-to-government consultation initiated by the City has not resulted in the identification of a TCR within or near the proposed project.

## 4.14.3 Regulatory Setting

### State

#### *California Environmental Quality Act*

CEQA also requires lead agencies to determine if a project would have a significant effect on the environment, including significant effects on historical or archaeological resources. Under CEQA Section 21084.1, a project that may cause a substantial adverse change to the significance of a historical resource is a project that may have a significant effect on the environment. CEQA guidelines recognize that historical resources include;

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR;

- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

If a lead agency determines that an archaeological site is a historical resource, then the resource under CEQA must be protected. If a project may cause a substantial adverse change to the recourse and avoidance is not feasible, the lead agency must identify potentially feasible measures to lessen the impact to less than significant levels.

If an archaeological site does not meet the historical resource criteria contained in the State CEQA Guidelines, and it is not deemed a unique archaeological resource in accordance, no further action would be required.

### *California Register of Historical Resources*

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" Public Resources Code (PRC) (Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC Section 5024.1 (c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

### *California Health and Safety Code*

The California Native American Graves Protection and Repatriation Act of 2001 is intended to provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect. The intent of the legislature shall also do the following:

- Apply the state's repatriation policy consistently with the provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.), which was enacted in 1990.
- Facilitate the implementation of the provisions of the federal Native American Graves Protection and Repatriation Act with respect to publicly funded agencies and museums in California.
- Encourage voluntary disclosure and return of remains and cultural items by an agency or museum.
- Provide a mechanism whereby lineal descendants and culturally affiliated California Indian tribes that file repatriation claims for human remains and cultural items under the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.) or under this chapter with California state agencies and museums may request assistance from the commission in ensuring that state agencies and museums are responding to those claims in a timely manner and in facilitating the resolution of disputes regarding those claims.
- Provide a mechanism whereby California tribes that are not federally recognized may file claims with agencies and museums for repatriation of human remains and cultural items.

### *Senate Bill 18*

As of March 1, 2005, California Government Codes 65092; 65351; 65352; 65352.3; 65352.4; 65352.5; and 65560, formerly known as Senate Bill 18 (SB 18), requires that cities and counties contact and consult with Native American tribes prior to amending or adopting any general plan or specific plan, or designing lands as open space. The purpose of SB 18 is to involve Native Americans at the onset of the planning process to allow for considerations concerning the protection of traditional tribal cultural places in the context of broad local land use policy prior to individual site-specific, project level and land use decision. Tribes have 90 day from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe. At least 45 days before a local government adopts or substantially amends a general plan or specific plan, the local government must refer the proposed action to agencies, including Native American tribes, for review and comment.

On May 19, 2020, the City of Rancho Mirage sent letters regarding the proposed Porcupine Creek Retreat Specific Plan, to 19 tribes as part of this requirement. The following tribes were contacted:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Missions Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians

- Campo Band of Mission Indians
- Ewiaapaayp Tribal Office
- Jamul Indian Village
- La Posta Band of Mission Indians
- Los Coyotes Band of Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- Ramona Band of Cahuilla Mission Indians
- Santa Rosa Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Torres-Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians
- Morongo Band of Mission Indians
- Soboba Band of Luiseno Indians
- Quechan Tribe of the Fort Yuma Indian

To date, two Tribes have responded, the Quechan Indian tribe and the Morongo Band of Mission Indians. Both Tribes did not wish to comment and deferred their support to local tribes.

### *California Assembly Bill 52 (AB 52)*

In addition to Native American Consultation that occurs as part of the Cultural Resource Assessment, AB 52, which went into effect on July 1, 2015 requires a lead agency to consider a project's impacts on Tribal Cultural Resources. TCR as defined in Public Resources Code § 21074 are as follows:

(a) "Tribal cultural resources" are either of the following:
  (1) Sites, features, places cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
  (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Under AB 52, the Lead Agency is required to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. Tribal consultation can be initiated once a project application is deemed complete. Once the Lead Agency has contacted necessary tribal governments, tribes have 30 days to respond to comments or request for consultation. "Consultation" is the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes must be conducted in a way that is mutually respectful of each party's sovereignty. Consultation must also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance. Consultation concludes when either: the parties agree on measures to mitigate or avoid significant impacts to TCRs or a party, in good faith and after reasonable effort, concludes that a mutual agreement cannot be reached.

### Regional and Local

#### *City of Rancho Mirage Historic Preservation Commission*

The Historic Preservation Commission consists of five (5) members appointed by the City Council. The commission reviews nominations of certain structures, sites, and districts of historic significance and makes recommendations to the City Council as to which structures, sites, and/or districts within the City should be designated a Historical Resource of the City.

## 4.14.4 Project Impact Analysis

### Thresholds of Significance

Upon development of the proposed project, Tribal Cultural Resources within or near the project site could potentially be impacted. The thresholds analyzed in this section are derived from Appendix G of the CEQA Guidelines and are used to determine the level of potential effect. The significance determination is based on the recommended criteria set forth in Section 15064.5 of the CEQA Guidelines. For analysis purposes, development of the proposed project would have a significant effect on tribal cultural resources if it is determined that the project will:

a. Cause a substantial adverse change in significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is

geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

## Methodology

As part of the preparation of the Environmental Impact Report (EIR), Statistical Research, Inc. (SRI), conducted a Phase I cultural resources study for the 191-acre Specific Plan area . A records-search was conducted by SRI for the project area at the California Historical Resources Information System Eastern Information Center (EIC), Department of Anthropology, University of California, Riverside. The records search looked at all reports from previous archaeological surveys executed within a 1-mile radius of the project area. All previously recorded prehistoric cultural resources within a 1-mile radius and all historical-period resources within a $^{1}$/2-mile radius also were examined.

In addition to the research conducted at the EIC, archival studies were conducted at other libraries, research institutions, and government agencies. The information gathered at these repositories provided valuable information on both prehistoric and historical-period resources within the project area. Historical maps were consulted for information regarding specific historical-period land use in and around the project area. The online USGS Historical Topographic Map Collection and online BLM/U.S. General Land Office (GLO) records were consulted.

The results of the records search indicated that six previously conducted projects included work in portions of the project area. Of these, four were conducted in support of work associated with the West Magnesia Canyon Flood Control Channel), one was a survey and site evaluation for the Magnesia Falls Cove EIR, and one was mitigation of eight archaeological sites in support of a subsequent EIR to support permitting of the existing private estate and golf course.

A total of 13 prehistoric archaeological sites and 1 isolated artifact have been recorded within the current project boundaries. The archaeological sites within the current project boundaries consist of three ceramic scatters, four milling-feature sites, and six rock-cairn-alignment sites. The isolated artifact is a metate fragment. Only 1 previously recorded site, CA-RIV-3048, a small ceramic scatter, is located within the proposed development areas.

A buried-site-sensitivity model revealed that 69.71 percent of the project area is moderately sensitive for buried archaeological resources, in areas deeper than 5–10 feet below the ground surface. No portions of the project area were found to have a high or very high sensitivity for buried archaeological resources. Areas that are not sensitive are the portions of the project along hillslopes of greater than 25° from horizontal and in areas underlain by geologic units older than the late Pleistocene.

SRI surveyed all undeveloped portions of the project area and checked the locations of previously recorded resources within the developed portions of the project area. All of the 79.5 acres of the three undeveloped areas were surveyed, and areas of open ground surface in the seven proposed development areas were checked as well. Within the undeveloped areas, ground visibility was good, with little vegetation present. The seven development areas were covered extensively by vegetation and other landscaping. Seven previously recorded archaeological sites were visited and rerecorded during the survey. Six other previously recorded sites and the previously recorded metate could not be relocated.

No historical-period structures or other features are depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do not show any structures or other features in the project area.

Part of the records search and literature review involved contacting the Native American Heritage Commission (NAHC) for a list of traditional-use areas or sacred sites within the project area and a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. The NAHC Sacred Lands File search did not indicate the presence of Native American traditional cultural places within the project area. However, the NAHC provided a list of 19 contacts who could provide additional information on cultural resources within the project area. SRI sent a letter to all 19 contacts, describing the proposed project to solicit their input on the site. Seven tribes responded in writing, six of the tribes that responded had no further information to provide and did not identify the site as having cultural significance to their tribe. The Agua Caliente Band of Cahuilla Indians responded that the site was not located in their traditional reservation boundaries but is found to be part of their Traditional Use Area (TUA). Therefore, they have requested all copies of the records search, cultural report and site records, and the presence of an approved Native American Cultural Resources Monitor. This request has been incorporated into the project mitigation under the Cultural Resources section and is identified as CUL-2.

A pedestrian survey of the project area was conducted on May 27–29, 2020, by a team of three archaeologists. Because of the varied terrain of the project area, survey methods differed across the landscape, based on slope and level of development. At the edges of the project area, the crew surveyed open areas spaced at 15-m intervals, except in areas where the slope was very steep. In those areas, open ground was inspected where it was safe to walk. Within the golf course, the locations of previously recorded sites were examined, to determine whether the sites were still present or whether they had

been destroyed. The progress of the survey was monitored by means of Trimble Geo XT/XH Global Positioning System (GPS) units and high-resolution aerial photographs. The locations of previously recorded sites were photographed, and GPS points were taken at the recorded locations.

SRI surveyed all undeveloped portions of the project area, checked the locations of previously recorded resources within the developed portions of the project area, and checked the proposed development areas to confirm that these areas are highly disturbed from previous construction.

Consultation efforts under AB 52 and SB 18 did not elicit a response from any Native American tribe requesting consultation or resulted in the identification of a TCR within or near the proposed project. However, an approved Aqua Caliente Native American Monitor shall be present during all earth moving operations as identified as **Mitigation Measure CUL-2** in **Section 4.4, *Cultural Resources***.

### *a.i. Would the project cause a substantial adverse change in the significance of a Tribal cultural resource to a listed or eligible for listing in the California Register of Historical Resources, or in a local Register of historical resources as defined in Public Resource Code Section 5020.1(k)?*

As discussed in the **Section 4.4, *Cultural Resources***, research conducted by SRI for the project-specific cultural report, did not find any historical-period structures or other features depicted within the project area. As discussed throughout this document, the project site has been disturbed by development since 1997.

The results of the records search and fieldwork performed by SRI identified thirteen previously recorded prehistoric archaeological sites in the overall project area. Six of these sites were not relocated. One of these six sites (RIV-3048) was previously recorded in a proposed development area, this site was destroyed during construction of the golf course, and no other known cultural resources are located in the proposed development areas. The other five sites that could not be relocated were also destroyed by the construction of the golf course. SRI relocated and documented seven of the thirteen previously recorded sites. Each of these rerecorded sites consists of one or more stacked-rock cairns. These seven archaeological sites are all located on the margins of the property and will not be impacted by the proposed development. SRI recommends that these seven sites should be avoided. If development plans change and the sites will be impacted by the development, then they should be evaluated for listing in the CRHR.

Historical maps were consulted for information regarding specific historical-period land use in and around the project area. The online USGS Historical Topographic Map Collection and online BLM/U.S. General Land Office (GLO) records were consulted. No historical-period structures or other features are depicted within the project area on the 1856 or 1905 GLO plat maps. The 1904 Indio, California, 30-minute USGS topographic quadrangle map and its 1910, 1917, 1925, 1930, 1939, and 1948 revisions do

not show any structures or other features in the project area. Impacts to historical resources are less than significant without mitigation.

***a.ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.***

During the 30-day response period for AB 52 consultation, the City of Rancho Mirage received one response from the Quechan Indian tribe. They declined to comment on the project and deferred to closer local tribes. No further comments were received during the consultation period.

Although no Tribal Cultural Resources were identified within the project site during AB 52 consultation, the project applicant must hire an approved Agua Caliente Native American Monitor Cultural Resources Monitor for all development-related ground-disturbing activities for excavations deeper than 5-10 feet below the ground surface in the previously disturbed golf course areas. If development is to occur in undisturbed areas of the property, tribal monitors shall be present prior to the commencement and during any ground disturbing activities to ensure that no unknown subsurface TCRs are impacted during development of the proposed planning area. Implementation of **Mitigation Measure CUL-2** in **Section 4.4*, Cultural Resources,*** of this draft EIR, would ensure, impacts would be less than significant to a known Tribal Cultural Resource.

## 4.14.5 Cumulative Impacts

Development within the City of Rancho Mirage and its Sphere of Influence would have the potential to result in cumulative impacts to Tribal Cultural Resources. Tribal cultural resources that can be avoided or preserved would have no impacts. Nevertheless, if avoidance or preservation is infeasible, those impacts must be considered in combination with tribal cultural resources that would be impacted for other projects included in the cumulative project list found in Section 4, *Environmental Impact Analysis*.

Any cumulative projects that involve ground-disturbing activities, including the development of land uses designated under other surrounding jurisdictions' general plans, would have the potential to result in significant impacts to tribal resources. However, all projects would be regulated by applicable federal, state, and local regulations, including government to government consultation with local tribes under AB 52, in an effort to avoid the destruction of tribal cultural resources. As discussed in this section, the proposed project would not directly contribute to the loss of any known TCRs. Therefore, with adherence to policies and mitigation as identified in this section, development of the proposed project is expected to be less than significant.

## 4.14.6 Mitigation Measures

The following mitigation measure from **Section 4.4, *Cultural Resources***, Section 4.4.6, *Cultural Resources Mitigation,* applies to reducing potential impacts to Tribal Cultural Resources:

**CUL-2**: An approved Agua Caliente Tribal Cultural Resources Monitor shall be present on site if excavations are deeper than 5-10 feet below the ground surface in the previously disturbed golf course areas. Should development occur in undisturbed areas of the property, tribal monitors shall be present prior to the commencement and during ground disturbing activities. If buried cultural deposits are encountered, the monitor may request that destructive construction halt and the monitor shall notify a qualified archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Office and the Agua Caliente Tribal Historic Preservation Office.

## 4.14.7 Level of Significance After Mitigation

With implementation of **Mitigation Measures CUL-2** impacts to Tribal Cultural Resources would be reduced to less than significant.

## 4.14.8 Resources

1. California Native American Heritage Commission http://nahc.ca.gov/ accessed July 2020.
2. Rancho Mirage 2017 General Plan, Chapter 5 Conservation and Open Space, accessed June 2020.

# 4.15 Utilities and Service Systems

## 4.15.1 Introduction

This section addresses the existing utilities and service systems setting for the proposed Porcupine Creek Retreat project ("project"). This section also addresses the potential for the proposed project to impact the water supply, wastewater demand, and solid waste facilities of the project site and surroundings, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable. This section is based on the information contained in the *Porcupine Creek Retreat Specific Plan* and *Chapter 9, Public Service and Facilities from the Rancho Mirage General Plan*. Sources used in the preparation of this section are identified in **Chapter 8, *References*,** at the end of this Draft EIR.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with utilities at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to utilities in the Initial Study, the following does not require additional analysis in this Draft EIR.

*Requires or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects*

- The project site is fully developed and currently receives water, wastewater, electrical power, natural gas and telecommunications services. The sites storm drain system includes facilities which have been sized to provide enough storage for the 100-year controlling storm event. The project would extend utilities to the new construction areas and the extension of these services will occur within the projects existing footprint. The drainage concept is intended to utilize and augment existing drainage features and infrastructure. A series of lakes, low points, and retention areas throughout the project site are designed to capture surface runoff from the 100-year storm and convey it to the adjacent regional stormwater facilities. No new or expanded off-site water, wastewater, electric power, natural gas, or telecommunications facilities will need to be constructed or relocated. Therefore, impacts would be less than significant. No further analysis is needed.

*Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

- The project will comply with all applicable solid waste statutes and guidelines. All development is required to comply with the mandatory commercial and multi-family recycling requirements

of Assembly Bill 341. The project will also comply with the recycling requirements of Cal Green and develop a waste management plan that will include diverting at least 50% of construction and demolition material fill from landfills. No impacts relating to applicable solid waste statues and regulations are expected. No further analysis is needed.

Impacts found to be less than significant are further discussed in **Chapter 6, *Effects Not Found to be Significan*t** of this Draft EIR. Please consult **Chapter 9** for a glossary of terms and acronyms used in this Draft EIR.

## 4.15.2 Existing Conditions

### Existing Conditions

The Porcupine Creek estate was entitled in 1997 and thereafter constructed as a privat estate . Since 2011, the property has been remodeled and upgraded to its existing state. The current owner has added approximately 18,000 square feet to the site's total building footprint through the addition of spa treatment rooms, a tennis pavilion, a fitness center, a gate house, and new villas with an additional approximate 15,000 square feet planned for construction to serve the private estate through 2020, which is being constructed pursuant to the existing entitlements. Additionally, the landscaping and irrigation at the property has also been rehabilitated and remodeled. Water and wastewater services are provided to the site by the Coachella Valley Water District (CVWD). The site also receives solid waste and recycling services from Burrtec.

### Water Service

CVWD is the Public Water Supplier that provides water services to the City of Rancho Mirage. Established in 1918 under the County Water District Act provisions of the California Water Code, CVWD provides water related services for domestic water, wastewater collection and treatment, recycled water, agricultural irrigation water, drainage management, imported water supply, groundwater replenishment, stormwater management, and flood control and water conservation.

The Coachella Valley groundwater basin has been the principal source of water for the Valley since the early 1900s. This basin has an estimated storage capacity of 40 million acre-feet (AF) of water within the upper 1,000 feet and is divided into four subbbasins: Indio, Mission Creek, Desert Hot Springs, and San Gorgonio. The project site is specifically underlain by the Indio Subbasin, which is also known as the Whitewater River Subbasin. CVWD works with other local water agencies and Coachella Valley stakeholders to implement water conservation, water reuse, and groundwater recharge strategy to ensure water availability and system capacity to meet the growing needs of the Coachella Valley.

CVWD currently has approximately 109,714 domestic water connections and provided approximately 87,959 AF of water in 2018. CVWD serves all of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta, and a portion of Indio and Coachella. Other areas served with domestic water by CVWD

include a portion of lands near Desert Hot Springs, the Indio Hills area, and a portion of Cathedral City. CVWD also serves other rural communities, including Thermal, Mecca, Oasis, Desert Shores, Salton Sea Beach, Salton City, North Shore, Bombay Beach, and Hot Mineral Springs and other portions of unincorporated Riverside and Imperial Counties.

The CVWD service area encompasses approximately 640,000 acres, mostly within Riverside County, but also extends into northern Imperial and San Diego Counties; however, CVWD provides no urban water services to San Diego County. The Coachella Valley is bordered on the west and north by high mountains, which provide an effective barrier against coastal storms, and which greatly reduce the contribution of direct precipitation to recharge of the Coachella Valley Groundwater Basin. The majority of natural recharge comes from runoff from the adjacent mountains.

## Wastewater Service System

Wastewater that has been highly treated and disinfected can be reused for landscape irrigation and other purposes; however, treated wastewater is not suitable for direct potable use. Recycled wastewater has historically been used for irrigation of golf courses and municipal landscaping in the Coachella Valley since the 1960s. As growth occurs in the eastern Coachella Valley, the supply of recycled water is expected to increase, creating an additional opportunity to maximize local water supply.

CVWD operates five water reclamation plants (WRPs), two of them (WRP-7 and WRP-10) generate recycled water for irrigation of golf courses and large landscaped areas. WRP-4 became operational in 1986 and serves the communities from La Quinta to Mecca. WRP-4 effluent is not currently recycled; however, it will be in the future when the demand for recycled water develops and tertiary treatment is constructed. The other two WRPs serve isolated communities near the Salton Sea. A sixth WRP (WRP-9) was decommissioned in July 2015.

The Porcupine Creek wastewater flows to WRP-10 located on Cook Street in Palm Desert. WRP-10 consists of an activated sludge treatment plant, and a tertiary wastewater treatment plant. This WRP has the capacity to treat 18 million gallons per day (mgd) and treats an annual average flow of 10.8 mgd (12,000 AFY) from the activated sludge plant.

## Solid Waste

### *Solid Waste Services*

Riverside County Department of Waste Resources (RCDWR) is responsible for the efficient and effective landfilling of non-hazardous county waste. In this effort the Department operates five landfills and has a contract agreement for waste disposal with an additional private landfill and administers several transfer station leases. Every effort is made to recycle and reuse appropriate items with scrupulous attention to public health and safety. The RCDWR Planning Section ensures that the County's planned

and proposed waste management activities and projects are in compliance with applicable federal, state and local land use and environmental laws, regulations, and ordinances.

Solid waste disposal and recycling services for the City of Rancho Mirage is provided by Burrtec. This service provider offers its customers a wide range of services for residential to commercial businesses, construction-related activities and special events. Solid waste and recycling collected from the proposed project will be hauled to the Edom Hill Transfer Station. This transfer station is permitted to receive 3,500 tons per day (tpd). Residual waste from this transfer station is then sent to a permitted landfill or recycling facility outside of the Coachella Valley. These include Badlands Landfill, and the Lamb Canyon Landfill. Additional information on each landfill is provided below:

- **The Lamb Canyon Landfill** is located between the City of Beaumont and City of San Jacinto at 16411 Lamb Canyon Road (State Route 79), south of Interstate 10 and north of Highway 74. The landfill is owned and operated by Riverside County. The landfill property encompasses approximately 1,189 acres, of which 703.4 acres encompass the current landfill permit area. Of the 703.4-acre landfill permit area, approximately 144.6 acres are permitted for waste disposal. The landfill is currently permitted to receive 5,000 tpd of solid waste for disposal and 500 tpd for beneficial reuse. The site has an estimated total disposal capacity of approximately 20.7 million tons as of January 1, 2020, the landfill has a total remaining capacity of approximately 8.7 million tons. The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2029. Between January 2019 to December 2019, the Lamb Canyon Landfill accepted a daily average of 1,925 tons with a period total of approximately 591,125 tons. Landfill expansion potential exists at the Lamb Canyon Landfill site.
- **The Badlands Landfill** is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue and accessed from State Highway 60 at Theodore Avenue. The landfill is owned and operated by Riverside County. The existing landfill encompasses 1,168.3 acres, with a total permitted disturbance area of 278 acres, of which 150 acres are permitted for refuse disposal. The landfill is currently permitted to receive 4,500 tpd of solid waste for disposal and 300 tpd for beneficial reuse. The site has an estimated total capacity of approximately 20.5 million tons. As of January 1, 2020, the landfill had a total remaining disposal capacity of approximately 5.1 million tons. The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2022. Between January 2019 to December 2019, the Badlands Landfill accepted a daily average of 2,878 tons with a period total of approximately 886,388 tons. Landfill expansion potential exists at the Badlands Landfill site.

As part of its long-range planning and management activities, the RCDWR ensures that Riverside County has a minimum of 15 years of capacity, at any time, for future landfill disposal. The 15-year projection of disposal capacity is prepared each year by as part of the annual reporting requirements for the Countywide Integrated Waste Management Plan.

## 4.15.3 Regulatory Setting

### Federal

#### *Clean Water Act and Safe Drinking Water Act*

The Clean Water Act (CWA) was established in 1972 as the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industries. The EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

It is unlawful under the CWA to discharge any pollutant from a point source, which is a discrete conveyance such as pipes or man-made ditches, into navigable waters unless a permit is obtained. The National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Compliance monitoring under the NPDES Program encompasses a range of techniques in order to address the most significant problems and to promote compliance among the regulated community.

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. SDWA authorizes the EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met (EPA 2020).

#### *Resource Conservation and Recovery Act (RCRA)*

This law was enacted in 1976 and is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. The U.S. Environmental Protection Agency (U.S. EPA) oversees waste management regulation pursuant to Title 40 of the Code of Federal Regulations. Under RCRA, however, states are authorized to carry out many of the functions of the federal law through their own hazardous waste programs and laws, as long as they are at least as stringent (or more so) than the federal regulations. Thus, CalRecycle manages the State of California's solid waste and hazardous materials programs pursuant to U.S. EPA approval.

### State

#### *Water Supply Assessment*

Requirements for the preparation of a Water Supply Assessemnt (WSA) are set forth in Senate Bill 610 (SB 610), which was enacted in 2001 and became effective January 1, 2002. SB 610 amended Section 21151.9 of the Public Resources Code. It requires cities and counties and other CEQA lead agencies to

request specific information on water supplies from the Public Water System (PWS) that would serve any project that is subject to CEQA and is defined as a "Project" in Water Code Section 10912. This information is to be incorporated into the environmental review documents prepared pursuant to CEQA.

The Water Code requires a WSA be prepared for any project that consists of one or more of the following:

- A proposed residential development of more than 500 dwelling units
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space
- A proposed hotel or motel, or both, having more than 500 rooms
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area
- A mixed-use project that includes one or more of the projects specified above
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project
- For public water systems with fewer than 5,000 service connections, a project that meets the following criteria: any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The proposed project does not meet this criteria as defined by Water Code Section 10912 and therefore, does not require a WSA.

### *California Water Boards*

The California Water Board consists of the State Water Resources Control Board and the Regional Water Quality Control Board. Together they work to preserve, protect, enhance, and restore water quality. The State Water Board sets statewide water quality standards, issues statewide general permits, conducts statewide surface and groundwater monitoring and assessment, and issues orders for cleaning up contaminated sites. The State and Regional Water Boards also work with federal, state, and local agencies, as well as other environmental agencies to ensure a coordinated approach to protecting human health and the environment.

There are nine regional water quality control boards statewide. The nine Regional Boards are semi-autonomous and are comprised of seven part-time Board members appointed by the Governor and

confirmed by the Senate. Regional boundaries are based on watersheds and water quality requirements are based on the unique differences in climate, topography, geology, and hydrology for each watershed. Each Regional Board makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions. The project site is located in the Colorado River Basin Region (7).

### *Urban Water Management Plan*

In 1983, the Urban Water Management Planning Act (UWMPA) was established by Assembly Bill 797, and passage of this law recognized that water is a limited resource and that efficient water use and conservation would be actively pursued throughout the State of California. The UWMPA requires that water suppliers providing water for municipal purposes either directly or indirectly to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, prepare and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR) every five years.

UWMPs are required to support the water suppliers' long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. UWMPs must assess the reliability of water sources over a 20-year planning horizon during normal, single-dry, and multiple-dry years, describe management measures and water shortage contingency plans, report progress toward meeting conservation goals and targeted reduction in per-capita urban water consumption, and discuss the uses and planned uses of recycled water (CVWD 2020).

### *CalRecycle*

This is the term the State of California uses for its Department of Resources Recycling and Recovery, formerly known as the California Integrated Waste Management Board (CIWMB). This state agency County of Riverside Environmental Impact Report No. 521 4.17-44 Public Review Draft § February 2015 performs a variety of regulatory functions pursuant to CCR Title 27 and other regulations. Among other things, CalRecycle set minimum standards for the handling and disposal of solid waste designed to protect public health and safety, as well as the environment. (See CCR Section 20050, for example). It is also the lead agency for implementing the State of California municipal solid waste program deemed adequate by the US EPA for compliance with RCRA (Riv. County EIR No. 521).

### *California Integrated Waste Management Act (IWMA) Assembly Bill (AB) 939*

This act, AB 939, was passed by the State Legislature in 1989 to reduce dependence on landfills for the disposal of solid waste and to ensure an effective and coordinated system for the safe management of all solid waste generated within California. With its passage, solid waste management practices were redefined to require California cities and counties to divert disposal of solid waste by 50% by the year 2000. It also required local governments to prepare and implement plans to improve waste resource

management by integrating management principles that place importance on first reducing solid waste through source reduction, reuse, recycling and composting before disposal at environmentally safe landfills or via transformation (e.g., regulated incineration of solid waste materials). These plans must also be updated every five years (Riv. County EIR No. 521).

### *Mandatory Diversion and Recycling, AB 341*

Approved in 2011, this act amended the California Public Resources Code (Section 42649 et seq.) to address solid waste diversion (i.e., recycling) targets to decrease the amount of wastes going to landfills and thus extend their usable lives. AB 341 requires cities and counties, including Riverside County, to include source reduction, recycling and composting in their integrated waste management plans (IWMP). In addition, under AB 341 counties were required to "divert 50% of all solid waste from landfill disposal or transformation [e.g., incineration] by January 1, 2000, through source reduction, recycling and composting activities." By 2020, the target rises to "not less than 75% of solid waste." The RCDWR is responsible for implementing AB 341 in the unincorporated portions of Riverside County (Riv. County EIR No. 521).

## Regional and Local

### *Coachella Valley Water Management Plan 2010 Update*

CVWD initiated the first water management planning process in the early 1990s to address the overdraft conditions in the groundwater basin and to ensure that there would be adequate water supplies in the future. The plan is a 35-year blueprint for wise water management and the basis for all of CVWD's efforts to preserve the Coachella Valley's groundwater source.

The Coachella Valley Water Management Plan (CVWMP) was adopted by the CVWD Board in September 2002. The goal of the CVWMP is to reliably meet current and future water demands in a cost effective and sustainable manner. The CVWD Board recognized the need to update the CVWMP periodically to respond to changing external and internal conditions. The 2010 CVWMP Update meets that need. It defines how the goal will be met given changing conditions and new uncertainties regarding water supplies, water demands, and evolving federal and state regulations.

### *CVWD Model Water Efficient Landscape Ordinance 1302.4*

CVWD Landscape Ordinance 1302.4 required a series of reduction methods, including requirements that new developments install weather-based irrigation controllers that automatically adjust water allocation. Additional requirements included setbacks of spray emitters from impervious surfaces, as well as use of porous rock and gravel buffers between grass and curbs to eliminate run-off onto streets. With the exception of turf, all landscaping, including groundcover and shrubbery, must be irrigated with a drip system. Also, the maximum water allowance for landscaped areas throughout the CVWD service

area has been reduced by programming that requires developers to maximize the use of native and other drought-tolerant landscape materials and minimize use of more water-intensive landscape features, including turf and fountains. The City of Rancho Mirage has adopted by reference this landscape ordinance.

### *Sanitary Sewer Management Plan*

The Sanitary Sewer Management Plan (SSMP) describes the management of CVWD's sewer collection system and minimizes the number of sanitary sewer overflows. The SSMP is required by the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR 2006-0003) enacted May 2, 2006. The SSMP provides guidance for a properly managed, operated and maintained sanitary sewer system. All portions of CVWD's wastewater collection system are required to be managed, operated and maintained to provide adequate capacity to convey the peak wastewater flows, to minimize the frequency of Sanitary Sewer Overflows (SSOs), mitigate the impacts that are associated with any SSO that may occur, meet all applicable regulatory notifications and reporting requirements, and provide exceptional customer service to the residents and businesses served.

### *Countywide Integrated Waste Management Plan*

The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939), and is updated every five years. The CIWMP outlines and codifies the goals, policies and programs that the County of Riverside and its cities are implementing to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. The CIWMP's components include the Countywide Summary Plan, the Countywide Siting Element, the Source Reduction and Recycling Element, the Household Hazardous Waste Element and Non-Disposal Facility Element. Each of these Elements address plans for Riverside County and each of its cities. The Riverside Countywide Integrated Waste Management Plan was approved by the California Integrated Waste Management Board in September of 1996 and has subsequently been updated at five-year intervals as required by law. (Riv. County EIR No. 521)

## 4.15.4 Project Impact Analysis

### Thresholds of Significance

The following standards and criteria for establishing significance of potential impacts related to utilities and service system were derived from the CEQA Guidelines, Appendix G. Development of the proposed project would have a significant effect to if it is determined that the project would:

a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
b. Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
e. Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Threshold topics "a" and "e", are not analyzed further since screening criterion related to project utilities and service system concluded that there would be no impacts or less than significant impacts. See 4.15.1, *Introduction,* of this Utilities section.

## Methodology

The potential for project-specific and cumulative impacts associated with utilities and related service systems, was assessed based upon available data that considers the project, the project site, and related projects. Impacts on water demand, wastewater, and solid waste, that would result from the project were identified by determining the demand of the existing estate and comparing the existing service capacity against future demand associated with project implementation. A quantitative comparison was used to determine impacts of the project on future demands.

## Project Design Features

Project design features related to the project's impact on utilities and service systems are analyzed in the following discussions.

## Project Impact

### *b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The Porcupine Creek estate receives potable water from CVWD. The existing connection to the CVWD public water system on Dunes View Road, that currently serves the estate, will remain in place. A new connection is proposed on Indian Trail Road with an alternative point of connection on Magnesia Falls Drive (**Exhibit 4.15.1, *Conceptual Water Domestic Water Plan)***. There will be no expansion of turf areas

to the existing golf course, that would increase the water demand. CVWD recycled water facilities do not currently extend to the project site. This system is currently the only potable water delivery system for the project. The golf and open space areas are currently irrigated using groundwater from an offsite well located adjacent to the Whitewater channel. The project currently pays a replenishment fee to CVWD for the water pumped from this well. The payment of these fees goes towards a portion of the costs to replenish the aquifer, including the cost of importing water for that purpose. CVWD's groundwater replenishment program is a key element of the UWMP, which has been developed to reduce the overdraft of the West Whitewater River Subbasin and provide a dependable long-term supply of high-quality water for water users within this Area of Benefit.

The proposed Porcupine Creek Retreat would extend the existing private network of water lines within the project boundary and existing public rights of way to accommodate new construction. The connection points on Indian Trail and the alternative location at Magnesia Falls are outside of the project boundary, but within the existing right of way. The construction activity of these additional connections would be temporary and limited and would not have an impact to any undisturbed land. The existing and proposed water demand calculations are based on square footage and number of units. As shown in **Table 4.15.1, *Estimated Water Service Demand***, the Porcupine Creek Retreat project would result in an increase of the existing potable water demand. The residential estate currently has an estimated water demand of 6.66 AFY and combined with the proposed project, the estimated potable water demand is 25.27 AFY. This is a conservative estimate based on a daily maximum occupancy of the retreat which would be unlikely to occur due to the seasonality of the hospitality industry in the Coachella Valley.

**Table 4.15.1 Estimated Water Service Demand**

| ***Land Use*** | ***Water Demand (AFY)*** |
|---|---|
| Existing Residential | 6.66 |
| Proposed Resort Hotel | 25.27 |

CVWD’s total groundwater production in the West Whitewater River Subbasin Management Area, was estimated to be 154,755 AF in 2018. Annual water production within the West Whitewater River Subbasin Management Area (groundwater extractions plus surface water diversions) for all producers, has averaged 160,496 acre-feet per year (AFY) for the past 6 years (2013-2018), down from the 191,638 AFY average from the previous 5-year period (2008-2012). Based on production records, approximately 22 to 25 percent of annual water production within the West Whitewater River Subbasin Management Area is allocable to DWA, and the remaining 75 to 78 percent is allocable to CVWD.

The available supplies and water demands for CVWD's service area were analyzed in the water supply conditions of the 2015 UWMP to assess the region's ability to satisfy current and future urban water demands, including those of the project, under three scenarios: a normal water year, a single dry year, and multiple dry years. According to the 2015 UWMP, the urban water demands in the CVWD service

area (retail supply totals) are estimated to grow from 114,600 AF in 2020 to 194,300 AF in 2040. Therefore, the estimated Project demands (25.27) represent approximately 0.02 percent of the total water supply number (114,600 AF) for 2020 and would represent 0.01 percent of the total water supply number (194,300 AF) for 2035.

As discussed in the 2010 CVWMP Update, CVWD has many programs to maximize the water resources available to it including recharge of its Colorado River and State Water Project (SWP) Exchange supplies, recycled wastewater, desalinated shallow semi-perched brackish groundwater, conversion of groundwater uses to canal water and conservation including tiered water rates, a landscaping ordinance, and outreach and education. The 2010 CVWMP Update and CVWD replenishment assessment programs establish a comprehensive and managed effort to eliminate overdraft.

In addition to the requirements for the 2015 UWMP, CVWD maintains water management policies within its 2010 CVWMP Update to comprehensively protect and augment the groundwater supply. As defined in the 2010 CVWMP Update, CVWD is reducing reliance on groundwater sources by utilizing more Colorado River water, SWP Exchange water, and recycled water. Per this plan, CVWD also implements source substitution and conservation measures to reduce demands on the aquifer. The goal is to reduce the overall water demand by 20 percent by 2020 pursuant to SB x7-7. CVWD anticipates this water use reduction level will be maintained through the remainder of the planning period.

The proposed project will continue to implement water conservation measures in accordance with the applicable landscape ordinance requirements pertaining to water efficient irrigation systems and drought-tolerant plant selection (Rancho Mirage Municipal Code 17.24). Interior fixtures are also expected to be water efficient, thus complying with the local water conservation strategies. Based on the information provided in this analysis, there is substantial evidence to support a determination that there will be sufficient water supplies to meet the demands of the project. Therefore, impacts to the water supply as a result of the proposed project would be less than significant.

### *c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity the project's projected demand in addition to the provider's existing commitments?*

The project site is currently connected to gravity sewer provided by CVWD. Development of the Porcupine Creek Retreat would augment the network of existing private sewer lines to accommodate new construction. This upgraded interior system will continue to use the existing connection on Dunes View Road in addition to constructing two potential alternate sewer connections. As shown on **Exhibit 4.15.2*, Conceptual Sewer Plan*,** the alternate connections would involve connecting a 6" sewer main on Magnesia Falls and an 8" sewer main on Indian Trail. Both connection points would occur just outside of the project boundary, in the existing right of way, and would not impact any native undisturbed land.

CVWDs peak flow factor of 200 gallons per day per equivalent dwelling unit (EDU), was used to determine the existing and proposed wastewater generation for the project. The estate currently has an estimated wastewater demand of 0.01 mgd and the combined wastewater demand of the existing and proposed retreat is 0.04 mgd. This is a conservative estimate based on a daily maximum occupancy of the retreat which would be unlikely to occur.

CVWD's Water Reclamamtion Plant-10 (WRP-10) has an existing secondary wastewater treatment capacity of 18 mgd. The annual average daily flow is 10.8 mgd from the activated sludge plant. The project's wastewater flow is anticipated to increase the existing average annual flow to 10.84 mgd. This minimal increase is well within WRP-10's treatment capacity. Although recycled water is not available to the project site, approximately 60 percent of wastewater received at this plant receives tertiary treatment for reuse. This water is then used for golf course and other forms of landscape irrigation in other areas located within the CVWD boundary. This means that the increase of effluent is then converted into an increase in total recycled water production. The project's net estimated daily wastewater generation would remain under the maximum 18 mgd. Therefore, existing wastewater treatment facilities would have sufficient capacities to accommodate wastewater generated by the project. Less than significant impacts related to wastewater are expected.




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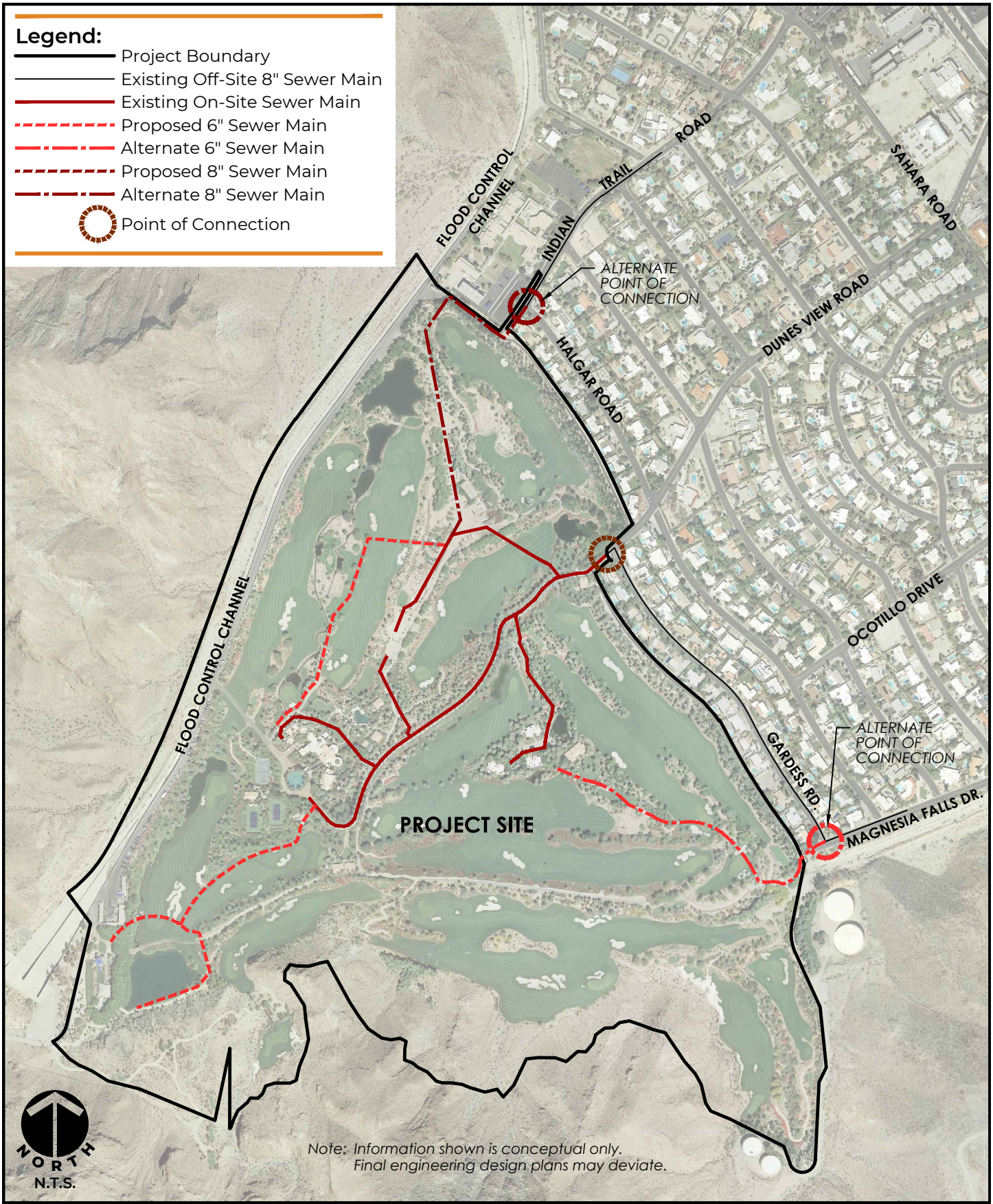
# CONCEPTUAL DOMESTIC WATER PLAN

## PORCUPINE CREEK RETREAT

ENVIRONMENTAL IMPACT REPORT

EXHIBIT 4.15.1

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# CONCEPTUAL SEWER PLAN

**PORCUPINE CREEK RETREAT**
ENVIRONMENTAL IMPACT REPORT

EXHIBIT
4.15.2

### *d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The project site currently receives solid waste and recycling services from Burrtec. Solid waste and recycling collected from the site is hauled to the Edom Hill Transfer Station. Residual waste from this transfer station is then sent to a permitted landfill or recycling facility outside of the Coachella Valley. These include the Badlands Landfill, and the Lamb Canyon Landfill. Landscape waste from the golf course would have no change to its current program and would continue to be hauled to a green waste facility for compost.

Buildout of the proposed project would increase the amount of solid waste that currently exists at the site. As shown in **Table 4.15.2**, ***Solid Waste Generation*** the estate is currently estimated to generate approximately 86 pounds of solid waste per day based on the number of dwelling units, based upon established solid waste generation rates. This generation rate overstates the estate's actual waste generation because it does not factor in the required solid waste reduction efforts currently implemented at the estate. Development of the proposed project would require a land use change (from residential to retreat) that would result in a hotel solid waste generation rate, calculated at pounds per room per day. As shown in the table below, the proposed project's solid waste demand is expected to generate approximately 54 pounds of solid waste per day or 0.07 tons per day. If the existing residential units were converted to hotel units, the overall solid waste generation would be estimated at 100 pounds per day. Given the seasonal fluxuations in occupancy rates, both of these waste generation calculations are considered to be overly conservative. In addition, the project is not expected to generate solid waste that would be typical of a standard resort hotel.

**Table 4.15.2 Solid Waste Generation for the Project**

| | *Units* | *Rate* | *Solid Waste pounds per day* |
|---|---|---|---|
| ***Existing Porcupine Creek Estate*** | | | |
| Residential | 7[1] | 12.23 per du | 86 |
| | | | |
| ***Proposed Porcupine Creek Retreat*** | | | |
| Resort Hotel | 27 | 2 lbs per day | 54 |
| | | **Total** | **140** |
| | | **Tons per day** | **0.07** |
| | | **Tons per year** | **25.55** |

*Source: Generation Rates are from CalRecycle*

*Note:*

1. This includes the main house with casitas and the existing villas. Solid waste is calculated per dwelling unit and not by the number of bedrooms or keys. This anlsysis is considered conservative in that each existing villa is being counted as a single family home, even though the villas operate more like a hotet unit or guest house, and generate far less than 12.23 pounds of solid waste per day.

Collected solid waste from the project site will be transported to the Edom Hill Transfer Station which has a permitted capacity of 3,500 tons per day (tpd). Residual waste would be diverted to the Lambs Canyon Landfill or the Badlands Landfill. Lambs Canyon Landfill has is currently permitted to receive 5,000 tpd of solid waste for disposal and 500 tpd for beneficial reuse. The site has an estimated total disposal capacity of approximately 20.7 million tons and as of January 1, 2020, the landfill has a total remaining capacity of approximately 8.7 million tons. The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2029. The proposed Porcupine Retreat project is expected to generate 25.55 tons of solid waste per year and 0.07 tons per day. This would be less than one percent of the landfill's daily capacity.

The Badlands Landfill is currently permitted to receive 4,500 tpd of solid waste for disposal and 300 tpd for beneficial reuse. The site has an estimated total capacity of approximately 20.5 million tons. As of January 1, 2020, the landfill had a total remaining disposal capacity of approximately 5.1 million tons. The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2022. Solid waste from the proposed project that is diverted to this landfill would also be less than one percent of its daily capacity.

Development of the proposed project would generate an increase in solid waste that can be served by the existing capacity of the County's landfills. The project would not impede the City's ability to meet the waste diversion requirements of the California Integrated Waste Management Act. The change in land used will result in the requirement of implementation of an onsite Waste Recycling Plan (WRP.) The

Plan shall be submitted and approved by the City of Rancho Mirage Planning Division. The WRP will specify the methods by which the project would meet the current diversion of solid waste and construction material used and generated by the project from landfill disposal. All solid waste activities resulting from the implementation of the proposed project will be carried out in compliance with all state, federal and local statues regulating solid waste. Therefore, impacts to solid waste would be less than significant.

## 4.15.5 Cumulative Impacts

New and existing local development within the City and the surrounding project area has the potential to result in cumulative impacts when combined with those projects listed in **Table 4-1, *Cumulative Projects*** in Chapter 4.0 of this document. As discussed below, the project would not result in a significant cumulative impact to the utilities and service systems.

### *Water Supply*

As discussed in the above analysis, the proposed Porcupine Creek project's water demand of 25.27 AFY would not exceed the water supplies available to serve the project. CVWD's 2015 UWMP has determined that it has sufficient supplies to meet this demand, in addition to its other existing and projected demands, during normal, single dry, and multiple dry years. The proposed project's contribution to cumulative water supply impacts would also be less than cumulatively considerable.

### *Waste Water*

The project would result in an increase to wastewater flows. However, the CVWD 2010 Urban Water Management Plan projects wastewater of WRP-10 to 17,400 AFY (15.53 mgd) in year 2045. As such, the Projects conservative estimate of a net 0.04 gpd would account for less than 1 percent of the cumulative growth. Proposed projects within the City and other local jurisdictions within CVWD's boundary would be required to undergo environmental review to determine if the existing CVWD wastewater infrastructure has adequate capacity to serve the project or if other onsite and off-site improvements would be necessary in order to provide service.

As discussed in this document, adequate sewer capacity exists to the serve the projects minimal increase to wastewater. The proposed project would connect into the existing sewer main on Dunes View Road and construct two potential alternate sewer connections that would serve the site. The projected increase in wastewater flows would not require the expansion of wastewater treatment facilities.

Additionally, all new development in the City would be required to complete an environmental analysis per CEQA Guidelines, which would analyze and disclose any potentially significant impacts on wastewater services. Therefore, the project's contribution to cumulative wastewater would have less than significant impacts.

### *Solid Waste*

Development projects within the project area and in the City would be reviewed during the development review process to ensure they are designed to comply with all applicable solid waste regulations. Additionally, all new development within the City must obtain a Waste Recycling Plan to ensure the project would meet the current diversion of solid waste and construction material used and generated by the project from landfill disposal. As discussed in this section, the project is conservatively projected to generate approximately 25.55 tons of solid waste per year and 0.07 tons per day. The landfills serving the City of Rancho Mirage and the project site have an available remaining capacity. The Lamb Canyon Landfill has a remaining capacity of 8.7 million tons and the Badlands Landfill has a remaining disposal capacity of 5.1 million tons. There is potential for landfill extension at both sites. The proposed project represents a small percentage of the overall remaining capacity of the landfills and would not substantially shorten the life of the landfills. Therefore, cumulative impacts to solid waste would be less than significant.

## 4.15.6 Mitigation Measures

No Mitigation Measures are required.

## 4.15.7 Level of Significance After Mitigation

Impacts associated with Utilities and Service Systems will be reduced to less than significant levels, with project compliance with all design standards set forth by the City of Rancho Mirage and CVWD.

## 4.15.8 Resources

1. CalRecylce Estimated Solid Wase Generation Rates, CalRecycle, https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates#Residential accessed August 2020.
2. Coachella Valley Water District Urban Water and Management Planning Website http://cvwd.org/543/Urban-Water-Management-Planning accessed July and August 2020.
3. Coachella Valley Water District 2019-2020 Annual Report https://www.cvwd.org/blog.aspx?iid=15
4. County of Riverside Environmental Impact Report No. 521 Public Review Draft February 2015 https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/04-17_PublicFacilities.pdf, accessed August 2020.
5. Rancho Mirage 2017 General Plan, Chapter 5 Conservation and Open Space, accessed June 2020.
6. Riverside County Department of Waste Resources https://www.rcwaste.org/business/planning/ciwmp accessed August 2020.

# 4.16 Wildfire

## 4.16.1 Introduction

This section addresses potential wildfire hazard impacts that may result from construction or operation of the proposed Porcupine Creek Retreat Specific Plan project ("project"). The following discussion addresses existing wildfire hazard conditions of the project site and surroundings, considers applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable. This section is based on the information contained in the *Porcupine Creek Retreat Specific Plan* and the *2017 Rancho Mirage General Plan*.

## 4.16.2 Existing Conditions

### Wildfires

A wildfire is an unplanned fire that burns in a natural area such as a forest, grassland, or prairie. Wildfires are often caused by humans or lightning and are exacerbated by steep slopes, dense vegetation (fuel), and dry and windy weather conditions. When these conditions are present, a wildfire can burn quickly and over a vast area, damaging hillsides, essential infrastructure, homes, and buildings.

The City of Rancho Mirage is occupied by both urban and undeveloped uses. The central and northern portion of the City is primarily defined by an urban context, with few remaining vacant areas. Meanwhile, the southern and western portions of the City are occupied by the Santa Rosa Mountains, which are primarily undeveloped and characterized by steep topographic gradients that are generally conducive to spreading wildfires. Furthermore, the area's hot, dry summer and autumn weather is considered ideal for generating the dry vegetation that fuel most wildfires. However, wildfires in the undeveloped local mountains are not common in the City of Rancho Mirage due to the mountain's natural terrain, which is steep, rocky, and dry. The rocky topographic character of the mountain is not conducive for the growth of dense vegetation, and, as a result, the amount of fuel available for wildland fires is limited. Additionally, the distance between the existing vegetation does not allow wildfires to spread easily. The only recorded historical wildfire near the City is the Dry Falls Fire that occurred in August 1980 and southeast of Rancho Mirage. Additionally, landscaped areas throughout the City are carefully maintained and watered regularly, creating conditions that limit the possibility for vegetation fires to ignite and spread.

### *Wildland Urban Interface*

A Wildland Urban Interface (WUI) is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels. People and man-made structures in WUI areas are more susceptible to the impacts of wildfires due to their adjacency to areas that provide fuel to wildfires, such as forests with dense vegetation.

The project site is located in an area surrounded by urban land uses, including residential units, and natural open space land uses, including the Santa Rosa Mountain Range to the north, west and south. Although the project is located adjacent to undeveloped and natural areas of the Santa Rosa Mountains, these areas do not include dense vegetation due to steep and rocky terrain, as stated previously. Therefore, the project is not located in an area designated as a WUI.

Additionally, the Santa Rosa Mountain Range is designated as permanent open space associated with the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Santa Rosa and San Jacinto Mountains Conservation Area, which is located immediately adjacent to the proposed project site. However, any necessary fuel modification for fire control would be done within the project site, and not in the adjacent conservation area.

### *High Fire Threat Areas*

#### *Rancho Mirage General Plan Area*

A large portion of City of Rancho Mirage's southwestern boundary abuts uninhabited mountain reserve areas, identified as the Santa Rosa Mountains. The mountainous areas in the City have a moderate to high fire threat, due to the undeveloped and steep conditions of the mountain range. According to Exhibit 27, *Fire Threat Map*, in the Rancho Mirage General Plan, the project is located in an area designated as having a moderate to high fire threat. The mountainous areas surrounding the project's northern, western, and southern boundaries are designated as having a mix of moderate and high fire threat.

#### *CAL FIRE Fire Maps*

CAL FIRE established high fire maps to locate areas in California that are threatened by the possibility of wildfires. The CAL FIRE high fire maps indicate areas that have increased risk of fires, based on topography, vegetation, and Wildland Urban Interface (WUI). CAL FIRE published two maps for the County of Riverside, which includes the Fire Hazard Severity Zones (FHSZ) in State Responsibility Areas (SRA) Map, and the Very High Fire Hazard Severity Zones (VHFSZ) in Local Responsibility Areas (LRA) Map. The following discussion defines SRAs and LRAs, as well as the project's designation within these maps.

Fire Hazard Severity Zones in State Responsibility Areas (FHSZ in SRA)

State Responsibility Areas (SRAs) are those lands within California that meet specific geographic and environmental criteria. These are areas where CAL FIRE has legal and financial responsibility for wildland fire protection and where CAL FIRE administers fire hazard classifications and building standard regulations. SRAs are defined as lands that 1) are county incorporated areas; 2) are not federally owned; 3) have wildland vegetation cover rather than agricultural or ornamental plants; 4) have watershed and/or range/forage value; and 5) have housing densities not exceeding three units per acre. Where SRAs contain built environment or development, the responsibility for fire protection of those improvements (non-wildland) is that of a local government agency.

The FHSZ in SRAs Map designates an SRA approximately a mile from the project property as having a high or very high fire hazard severity zone. The project site is not designated a State Responsibility Area.

Very High Fire Severity Zone in Local Responsibility Areas (VHFSZ in LRA)

Local Responsibility Areas (LRAs) include land within incorporated cities, cultivated agriculture lands and non-flammable areas in unincorporated areas and those lands that do not meet the criteria for SRA or Federal Responsibility Areas (FRAs). LRA fire protection is typically provided by city fire departments, fire protection districts, and counties, and by CAL FIRE under contract to local governments. LRAs may include flammable vegetation and WUI areas where the financial and jurisdictional responsibility for improvement and wildland fire protection is that of a local government agency.

The VHFHSZ in LRA Map designates the project site, and surrounding area, as a Non-VHFHSZ within an LRA.

### *Wildfire Pollutant Concentrations*

Wildfire smoke consists of a mixture of air pollutants of which particulate matter is the principal public health threat. The initial basis for understanding wildfire smoke health effects was derived primarily from studies of ambient air pollutants, specifically particulate matter. Extensive scientific evidence has demonstrated health effects in response to short-term (i.e., daily) particulate matter exposure ranging from eye and respiratory tract irritation to more serious effects, including reduced lung function, pulmonary inflammation, bronchitis, exacerbation of asthma and other lung diseases, exacerbation of cardiovascular diseases, such as heart failure, and even premature death. People in certain life stages and populations may be at greater risk of experiencing health effects, including people with respiratory or cardiovascular diseases, children and older adults, pregnant women, people of lower socioeconomic status, and outdoor workers. There is only limited evidence about the potential health impacts due to cumulative exposures from repeated, multi-day wildfire smoke exposures or multiple, consecutive fire seasons.

Wildfire smoke produced from combustion of natural biomass contains thousands of individual compounds, including particulate matter, carbon dioxide, water vapor, carbon monoxide, hydrocarbons, and other organic chemicals, nitrogen oxides, and trace minerals. Hazardous Air Pollutants (HAPs) (also referred to as Toxic Air Contaminants [TACs] by the California Environmental Protection Agency [CalEPA]) are also present in wildfire smoke. HAPs may contribute to adverse health effects in infants, children, pregnant women and their fetuses, elderly persons, those with existing lung, heart, or liver diseases, and persons engaging in physical activity. Overall, HAPs contribute to the cumulative irritant properties of smoke and are present in concentrations that may be above regulatory health guidance values.

In areas where the public is experiencing wildfire smoke, public health and air quality agencies should provide advice on strategies to limit exposure, which include staying indoors; limiting physical activity; reducing indoor air pollution sources; effectively using air conditioners and air filters or cleaners; creating cleaner air shelters; and using respiratory protection appropriately.

Recommended steps for public officials to take before a fire starts include: check fire risk in monthly outlooks at National Interagency Fire Center (NIFC) website and, especially if high, communicate risk to the public; consider how to implement the recommended actions in the guide; prepare a communication plan; and form partnerships with important partners or stakeholders (e.g., air quality agencies, local health providers, the media).

### *Prevailing Winds*

As stated previously, hot, dry and, windy conditions (weather), dense vegetation (fuel), and steep slopes (topography) are all conditions that favor the spread of wildfires. Strong winds supply oxygen to fire, preheating the fuels in the path of the fire, and transport embers ahead of the flaming front.

In the Coachella Valley, the general direction of wind travels from northwest to southeast due to the wind funneled from the west, through the San Gorgonio Pass. According to the Rancho Mirage General Plan Environmental Impact Report (EIR), the City is susceptible to high winds and their secondary effects (e.g., wind-blown sand erosion) due to the funneling of fierce winds through the steep mountain barriers. Intense winds typically occur in the northern portion of the City of Rancho Mirage, and locations at the base of the mountains are sheltered from these windy conditions.

The Porcupine Creek property is located immediately north, south and east of the Santa Rosa Mountains, which shelters the project property from windy conditions. As a result of the protected project, the spread of wildfires as a result of high winds is not anticipated at the site.

### *Post-Fire Slope Instability*

According to the *Post Wildfire Flash Flood and Debris Flow Guide*, published by the National Weather Service, large-scale wildfires dramatically alter the terrain and ground conditions. Vegetation on steep

and rocky hills typically stabilize soils with their root systems. Additionally, vegetation absorbs rainfall, reducing runoff. However, during fire season, which occurs in the summer months, vegetation on the steep hillsides is burned, leaving unstable soil conditions. Wildfires leave the ground charred, barren, and unable to absorb water, creating conditions suitable for slope instability, flash flooding and mudflow. Flood risk remains significantly higher until vegetation is restored, which may take up to five years after a wildfire.

Downstream flooding and debris flows occur following one of two processes: (1) surface erosion caused by rainfall runoff, and (2) landsliding caused by rainfall seeping into the ground. Surface erosion runoff processes are the most prevalent contributors to debris flows since fires commonly reduce the rate at which water can seep into the soil. Landsliding processes are less common causes of fire-related debris flows, but prolonged heavy rains may increase soil moisture even after a wildfire. The saturated soil can fail, thus producing infiltration-triggered landslides, which can be shallow or deep-seated landslides.

As stated previously, the scarce and scattered vegetation on the slopes of the Santa Rosa Mountains, does not provide fuel to sustain a wildfire. Therefore, fire threat is low in the City of Rancho Mirage, including the project site and other areas adjacent to the mountains, and post-fire slope instability and flooding is not likely in areas adjacent to the Santa Rosa Mountains. Further analysis is provided in discussion d. of this Wildfire Section.

## 4.16.3 Regulatory Setting

Wildfires pose a threat to both humans and the environment, and therefore are regulated by federal, state, and local programs, which are discussed subsequently.

### Federal Programs

#### *US Fire Administration*

As an entity of the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA), the mission of the U.S. Fire Administration (USFA) is to support and strengthen fire and emergency medical services (EMS) and stakeholders to prepare for, prevent, mitigate and respond to all hazards. The USFA and the National Fire Academy (NFA) was created in 1974 after congress passed the Federal Fire Prevention and Control Act. Since that time, the USFA has help reduce fire deaths through data collection, public education, research and training efforts.

##### *A Prepared and Resilient Fire and Emergency Medical Services Strategic Plan 2019-2023*

The USFA published the Prepared and Resilient Fire and Emergency Medical Services Strategic Plan 2019-2023 to support and strengthen fire and Emergency Medical Services and stakeholders to prepare for, prevent, mitigate and respond to all hazards. Three goals of the 2019-2023 Strategic Plan

includes (1) build a culture of preparedness in the fire and Emergency Medical Services, (2) ready the nation's fire and Emergency Medical Services for all hazards, and (3) ensure the USFA is an innovative, knowledgeable and responsive organization. These goals are achieved by implementing strategic frameworks and objectives.

### *Federal Fire Prevention and Control Act in 1974*

The National Commission of Fire Prevention and Control, established pursuant to Public Law 90-259, made an exhaustive and comprehensive examination of the Nation's fire problem, which detailed the findings as to the extent of this problem in terms of human suffering and loss of life and property.

The Nation's fire problem is exacerbated by (A) the indifference with which some Americans confront the subject; (B) the Nation's failure to undertake enough research and development in fire and fire-related problems; (C) the scarcity of reliable data and information; (D) the fact that designers and purchasers of buildings and products generally give insufficient attention to fire safety; (E) the fact that many communities lack adequate building and fire prevention codes; and (F) the fact that local fire departments spend about 95 cents of every dollar appropriated to the fire services on efforts to extinguish fires and only about 5 cents on fire prevention.

The purpose of the Act is to:

- Reduce the Nation's losses caused by fire through better fire prevention and control;
- Supplement existing programs of research, training, and education, and to encourage new and improved programs and activities by state and local governments;
- Establish the United States Fire Administration and the Fire Research Center within the Department of Commerce; and
- Establish an intensified program of research into the treatment of burn and smoke injuries and the rehabilitation of victims of fires within the National Institutes of Health.

## State Programs

### *Fire Hazard Severity Zones – Public Resources Code Sections 4201-4204*

Public Resource Code (PRC) 4201 through 4204 provides for the classification of lands within state responsibility areas in accordance with the severity of fire hazard present for the purpose of identifying measures to be taken to reduce the rate of spreading and the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property. The director shall, by regulation, designate fire hazard severity zones and assign to each zone a rating reflecting the degree of severity of fire hazard that is expected to prevail in the zone. These designated zones shall be periodically reviewed and revised if needed.

### *California Department of Forestry and Fire Protection*

The California Department of Forestry and Fire Protection (CAL FIRE) protects over 31 million acres of California's privately-owned wildlands and provides varied emergency services in 36 of the state's 58 counties via contracts with local governments. The Department's Fire Protection Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education, and law enforcement. Typical fire prevention projects include brush clearance, prescribed fire, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities.

CAL FIRE has mapped Fire Hazard Severity Zone Maps for State Responsibility Area lands and Very High Fire Hazard Severity Zone Maps for Local Responsibility Area lands for each county in California through its Fire and Resources Assessment Program (FRAP). These maps place areas into different fire hazard severity zones based on a hazard scoring system using criteria for fuels, fire history, terrain, housing density, and occurrence of severe fire weather where urban fires could result in catastrophic losses. The fire maps allow state and local agencies to identify areas susceptible to wildfire hazards. The City and project property's location on CAL FIRE's fire maps are discussed in Section 4.16.2, *Existing Conditions,* of this Wildfire Section.

### *California Fire Code*

Title 24 Part 9 of the California Code of Regulations (CCR), also referred to as the California Fire Code in the California Building Standards Code, is published by the order of the California legislature every three years. The building regulations, or standards, in the Fire Code have the same force of law and applies to occupancies in the State of California. There are 7 parts within the Fire Code that cover topics such as emergency planning and preparedness, fire and smoke protection features, means of egress, special uses and operations, and hazardous materials. Regulations of the California Fire Code shall be enforced by the State Fire Marshal, the chief of any city or county fire department or fire protection district, and their authorized representatives, in their respective areas of jurisdiction.

### *California Fire Plan*

The California Fire Plan is the state's road map for reducing the risk of wildfire. By placing the emphasis on what needs to be done long before a fire starts, the Fire Plan looks to reduce fire-fighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health. A cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE), the basic principles of the Fire Plan includes involving the community, assessing community risk, and developing solutions and implementing projects.

### *California State Hazard Mitigation Plan*

The California State Hazard Mitigation Plan (SHMP) acts as the state's primary hazard mitigation guidance document. The SHMP provides an updated analysis of the state's historical and current hazards, hazard mitigation goals and objectives, and hazard mitigation strategies and actions. The SHMP represents the state's overall commitment to supporting a comprehensive mitigation strategy to reduce or eliminate potential risks and impacts of disasters in order to promote faster recovery after disasters and, overall, a more resilient state. The Governor's Office of Emergency Services (Cal OES) leads the coordination efforts to update the SHMP. State Hazard Mitigation Plans are required to meet the Elements outlined in the Federal Emergency Management Agency's (FEMA) State Mitigation Plan Review Guide. Upon approval, the California SHMP is then adopted by the state for implementation for the next five years. The most recent SHMP was approved by FEMA on September 28, 2018.

The SHMP sets the mitigation priorities, strategies, and actions for the state. The plan also describes how risk assessment and mitigation strategy information is coordinated and linked from local mitigation plans into the SHMP and provides a resource for local planners of risk information that may affect their planning area. Chapter 8 of the SHMP analyzes fire hazards which includes discussions on wildfire hazards and structural fire hazards. Structural fire hazards can occur as a cascading hazard emerging from wildfires or earthquakes, or as an independent hazard event. In either case, fire hazard mitigation actions, such as the preparation and implementation of Local Hazard Mitigation Plans (LHMP) are crucial in minimizing potential risk.

According to the SHMP, a wildfire is defined as any free-burning vegetative fire that initiates from an unplanned ignition, whether natural (e.g., lightning) or human-caused (e.g. powerlines, mechanical equipment, escaped prescribed fires), where the management objective is full suppression. Wildland fires that burn in natural settings with little or no development are part of a natural ecological cycle and may be beneficial to the landscape if they burn within the historic range of variability for fire size and intensity. The wildland fire may result in secondary negative impacts in the form of air pollution, soil erosion (resulting in siltation of streams and lakes), or mudslides, though these impacts tend to be far less than what would occur following high severity fires in areas of historic fire suppression.

Wildland urban interface (WUI) fires are characterized by the intersection of the natural and the built environments and has been defined as the area or zone where structures and other human development meet or intermingle with undeveloped wildland or "vegetative fuels". California has widespread WUI fire vulnerability, according to the SHMP.

### *2018 California Strategic Fire Plan*

In compliance with Public Resources Code (PRC) Section 4114 and 4130, the Board of Forestry and Fire Protection regularly updates the State Strategic Fire Plan, with the most recent rendition

established August 22, 2018. The Strategic Fire Plan envisions a natural environment that is more fire resilient; buildings and infrastructure that are more fire resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships.

## Regional Programs

### *Riverside County General Plan*

According to the Safety Element of the Riverside County General Plan (RCGP), a significant portion of the County is undeveloped and consists of rugged topography with highly flammable vegetation. In particular, the hillside terrain of the County is very flammable. To minimize the potential for disastrous loss of structures and life (human and wildlife), a coordinated program to manage development in the hazardous areas has been identified by the County. The policies identified in the Riverside County General Plan seek to direct growth away from high fire areas and provide effective tools to manage construction and development in these areas. The RCGP outlines various policies and supporting programs regarding fire hazards including:

- **Safety (S) 5.1**: Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features by complying with County Fire and Building and Safety departments and meeting minimum standards for fire safety.
- **S 5.6**: Demonstrate that the proposed development can provide fire services that meet minimum travel times identified in Riverside County Fire Department Fire Protection and EMS Strategic Master Plan.
- **S 5.12**: Conduct and implement long-range fire safety planning, including stringent building, fire, subdivision, and municipal code standards, improved infrastructure, and improved mutual aid agreements with the private and public sector.
- **S 5.19**: Implement a coordination program with fire protection and emergency service providers to reassess fire hazards after wildfire events and to adjust fire prevention and suppression needs, as necessary.
- **S 5.20**: Implement a regional coordination program to increase support for coordination among fire protection and emergency service providers.

### *Riverside County General Plan Environmental Impact Report*

The Riverside County General Plan (RCGP) Environmental Impact Report (EIR) identifies wildland fires as a serious and growing hazard in the County, as development encroaches on outlying hills and grasslands. At the time the RCGP EIR was written, more than 8 million people had homes and businesses in California's wildland areas. An increased amount of people living in areas adjacent to wildland in Riverside County. This poses the most danger in wildfire conditions because of the

complex mix of fuels (vegetation), topography (hills), accessibility (roads), and structures (homes). This mixture creates a serious threat to the safety of both the public and firefighters.

### *Riverside County Fire Department*

The Riverside County Fire Department (RCFD), in cooperation with CAL FIRE, provides Fire and Emergency Services to residents of unincorporated areas of Riverside County and to their partner cities. The RCFD is committed to exemplary customer service and being a leader in fire protection and emergency services through continuous improvement, innovation and the most efficient and responsible use of resources.

According to the RCFD, fire risk is identified as the characteristics of the community that could create a hazard to the community. Criteria could include, but are not limited to, geography, topography, and critical infrastructure (i.e. structural, water supply for fire suppression, fixed alarm and extinguishing system placement, emergency apparatus response routes and target hazard accessibility, and wildland fuel management practices).

In addition to fire risk, fire services have been impacted by significant changes over the past 25 years. The RCFD has identified the following factors as they pertain to service delivery:

- Improvements to building codes
- Increased medical emergencies (e.g., aging population and increased cost of medical insurance)
- Legislative and regulatory changes
- Technology
- Economy

### *Riverside County Fire Department Strategic Plan 2009-2029*

The Riverside County Fire Department Strategic Plan was established to set goals and priorities for its future. Through the strategic planning process, the department was able to assess its organization, create a blueprint for the future and develop a plan to accomplish the new direction and goals. The strategic plan defines current and future needs and recommends goals and strategies to meet those needs during the lifetime of the plan. Elements within the Strategic Plan includes organizational mission, vision and values, six goals, strategies to achieve the goals, implementation of strategies, supporting analysis of the organization and performance audit. The six goals of the Strategic Plan will be implemented by the RCFD in order to:

1. Seek fiscal sustainability to ensure uninterrupted services.
2. Seek to have well-trained and certified individuals to enable the department to carry out its mission and all responsibilities.

3. Seek efficient and effective performance in its operations, measure its performance, and continuously improve its work methods.
4. Maintain a strong relationship with its cooperative partners and providing cost effective services while maintaining the highest level of customer service.
5. Seek to ensure that effective and efficient support services are in place to support the mission of the department.
6. Seek to have well maintained facilities, equipment, technology and apparatus that enable personnel to perform their jobs safely and efficiently.

### *Riverside County Operational Area Emergency Operation Plan*

The Riverside County Operational Area Emergency Operation Plan (EOP) was established by the County of Riverside to adequately protect public health and safety relative to wildland fires and other disaster conditions. The EOP addresses planned responses to extraordinary emergency situation, such as natural disasters, technological incidents and national security emergencies in or affecting Riverside County. The EOP describes the operations of the Riverside County Emergency Operation Center (EOC), which is the central management entity responsible for directing and coordinating the various Riverside County departments and other agencies in their emergency response activities.

### *Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan*

The Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan (RC MJLHMP) was established to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards.

The plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

Section 5 of the RC MJLHMP addresses the risk assessment process, which (1) identifies hazards, (2) profiles hazard events, (3) inventories assets, and (4) estimates losses. Riverside County's top five priority risk/hazards includes, in order from 1 to 5 (1 being the greatest risk) includes, earthquakes, pandemic (pan) flu, wildfire, electrical failure, and emergent disease. Wildfires in the County ranks as the third greatest risk/hazard. Per the RC MJLHMP, wildfires are defined as an uncontrolled fire spreading through vegetative fuels, posing danger and destruction to property.

Per the RC MJLHMP, managing the human/wildfire conflict requires a commitment of resources and a focused mitigation plan over the long term. The approach must be system-wide and include an informed/educated public, an effective wildfire suppression program, an aggressive hazardous fuels management program, land use policies and standards that protect life, property and natural

resources, building and fire codes that reduce structural ignitions, and construction and property standards that provide defensible space.

### *Riverside County Ordinance No. 659*

This ordinance, Abatement of Hazardous Vegetation, allows the County of Riverside the ability to require development applicants to pay established fire protection mitigation fees that are used by the Riverside County Fire Department to construct new fire protection facilities are provide facilities in lieu of the fee as approved by the RCFD. It also states a one-hundred-foot-wide strip of land around structures located on an adjacent improved parcel is recommended.

### *Riverside County Ordinance No. 859*

Ordinance No. 859, Water Efficient Landscape Requirements, mentions the use of defensible space and avoiding the use of fire-prone plant materials.

### *Hazardous Materials Business Plan*

All facilities in Riverside County that handle or store hazardous materials in quantities determined by state law and regulation are to report such use or storage to the County of Riverside Certified Unified Program Agency (CUPA) and Department of Environmental Health (DEH) before the initiation of operation of their business. In Riverside County, the CUPA is the Fire Department. The amount of detail required to be reported depends on whether or not a facility is subject to the State Hazardous Materials Business Plan (HMBP).

A HMBP is a document containing detailed information on the storage of hazardous materials at a facility. Chapter 6.95 of the California Health & Safety Code (HSC) and Title 19, Division 2, of the California Code of Regulations (CCR) require that facilities which use or store such materials at or above reporting thresholds must implement a HMBP. The thresholds include business that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas. For the proposed project this scenario would likely be limited to the golf course where golf carts would be maintained and serviced, and turf care products including fertilizers, pesticides and herbicides would be transported, stored and used.

## Local Programs

### *Community Emergency Preparedness Commission*

The Community Emergency Preparedness Commission was established in 1998 to advise the City Council on matters pertaining to emergency services planning and emergency preparedness training within the City. The Commission consists of five member and two technical advisors who are

appointed by the City Council. The Commission's main purpose is to prepare and train Rancho Mirage residents and businesses for natural disasters, such as major earthquakes and floods.

The mission of the Emergency Preparedness Commission is to motivate every person, business and organization in the City of Rancho Mirage to take actions that reduce future disaster damages and enhance disaster preparedness, response, and recovery. The Community Emergency Preparedness Commission provides resources to the community to prepare for various hazards, including wildfires, through local and national resources as well as training opportunities to achieve their mission. Training opportunities include:

- Community Emergency Response Training (CERT): A three-day training program that provides classroom and hands-on exercises in disaster preparedness, fire safety, medical triage, search and rescue, structure size up, and more.
- Business Emergency Response Training (BERT): A training for business owners and employees that discusses prevention, preparedness, response, recovery and mitigation from a business standpoint.

### *Rancho Mirage General Plan*

Compliant with California Government Code Section 65300, the Rancho Mirage General Plan (RMGP) was designed to function as an integrated, internally consistent and compatible statement of policies that regulates the development of lands within the City's corporate boundaries and Sphere of Influence (SOI). The RMGP discusses land use, circulation, housing, natural resources, environmental hazards, and public infrastructure and services with the City of Rancho Mirage and SOI.

Chapter 8, Safety, of the RMGP discusses the environmental hazards within the City, including various fire hazards. The Fire Hazards Section of the RMGP identifies existing fire hazards in or near Rancho Mirage and describes the regulatory environment established to safely manage these hazards. Due to the location and urbanization of Rancho Mirage, the City is exposed to two types of fire hazards: wildland fires, and urban and structural fires. Areas of the City that are adjacent to the Santa Rosa and San Jacinto Mountains are characterized by steep topographic gradients. The natural topography, with the climate, generally create ideal conditions for wildfires to occur. However, the steep and rocky terrain of the mountain slopes does not provide an environment for vegetation to grow. As a result, vegetation in these areas is sparse and are not conducive to spreading wildfires.

Chapter 9, *Public Services and Facilities* (PS&F), of the RMGP discusses the various services provided throughout the City, including fire services. Fire services within the City is provided by the California Department of Forestry and Fire (CAL FIRE) and the Riverside County Fire Department (RCFD). There are two fire stations within the jurisdictional boundaries of the City. These include Fire Station 50 at 70801 Highway 111, and Fire Station 69 at 71752 Gerald Ford Drive.

According to the RMGP, the availability of water is critical to effective fire suppression. The Coachella Valley Water District (CVWD) provides water services to Rancho Mirage and has a total groundwater storage capacity of 30 million acre-feet (one acre-foot equals 325,850 gallons) in the Indio Subbasin. The City and its Sphere of Influence (SOI) maintains a peak summer daily water demand of 41 mgd (approximately 126 acre-feet). CAL FIRE has general water flow requirements of 1,500 gallons per minute (gpm) for new development and 3,000 gpm for new commercial development. This is depicted in **Table 14.16.1, *Water Flow Requirements for Fire Protection,*** table below.

**Table 4.16.1 Water Flow Requirements for Fire Protection**

| Land Use | Water Flow |
|---|---|
| Agriculture/Open Space | 1,000 gpm for 2 hours |
| Single-Family Residential | 1,500 gpm for 2 hours |
| Multi-Family Residential/High Density | 2,500 gpm for 2 hours |
| Commercial/Industrial | 3,000 gpm for 3 hours |
| Source: California Department of Forestry and Fire Protection 2004 | |

### *Rancho Mirage General Plan Environmental Impact Report*

The Rancho Mirage General Plan Environmental Impact Report (EIR) was prepared to analyze the potential impacts associated with the implementation of the City General Plan. The range of environmental issues associated with implementation of the General Plan, and evaluated in the EIR include land use compatibility, traffic and circulation, flooding and drainage, geotechnical and seismic safety, air quality, and biological and archaeological resources. Noise impacts, visual resources, the availability of public services and facilities and socio-economic impacts are also assessed.

According to the RMGP EIR, the fire hazard of an area is typically based on the density and type of vegetation, topography, weather, dwelling unit density, and whether or not there are local mitigation measures in place that help reduce the zone's fire rating such as an extensive network of fire hydrants, fire-rated construction, or fuel modification zones. The California Board of Forestry ranks fire hazard of wildland areas of the state using four main criteria: fuels, weather, assets at risk, and level of service. Although there are areas within the City mapped as Very High Fire Hazard Severity Zones, the historical record indicates that the wildland fire hazard in the City is relatively low, according to the RMGP EIR.

The undeveloped areas in the southern portion of Rancho Mirage are characterized by steep topographic gradients that are generally conducive to spreading wildfires. Furthermore, the area's hot, dry summer and autumn weather is ideal to generate the dry vegetation that fuels most wildfires. However, the rugged terrain in and along the mountains are not conducive to the growth of dense vegetation, therefore, the amount of fuel available for wildland fires is very limited, and the distance between the strands of vegetation is too great for fires to spread easily.

### *Rancho Mirage Municipal Code*

The Rancho Mirage Municipal Code (RMMC) acts as a regulatory guideline, compliant with state and federal laws, for the City of Rancho Mirage. The RMMC regulates businesses, zoning, animals, vehicles and traffic, peace and morals, health and safety, and more. Regulations regarding wildfire hazards and safety are discussed within the RMMC in the following chapter:

*Title 15 Buildings and Construction:*

- **15.04.020, Modifications, amendments and deletions to the Building Code**: Section 903.2 Chapter 9 of the Building Code is modified by adding, deleting and amending the following provisions to provide more stringent fire protection requirements than required by the state which are necessary for the protection of the public's health, welfare and safety.
- **15.12.010, 2016 California Fire Code adopted with amendments**: The City of Rancho Mirage adopted and shall apply the "2016 California Fire Code", including supporting documents and appendices of the 2016 California Fire Code, with the exception of the amendments outlined in Chapter 15.12.

### *Rancho Mirage Fire Department*

Fire services for the City of Rancho Mirage are provided through a cooperative agreement with the State of California (CAL FIRE) and the County of Riverside Fire Department (RCFD). CAL FIRE and RCFD is an all risk, full-service fire department and has two fire stations located strategically throughout the City of Rancho Mirage to provide highly effective protection. Additionally, because of this regional cooperative agreement, the City benefits from resources responding from other nearby stations, ensuring that peak loads and major incidents are handled promptly. This reduces loss of life and property while keeping costs down. The mission of the department is to protect lives, property and natural resources within the communities they serve.

As previously determined, there are two fire stations within the City boundaries, Fire Station 50 and Fire Station 69. Fire Station 50, located at 70801 Highway 111, is responsible for the serving the southern portion of Rancho Mirage and is equipped with one medic engine (fire truck) and paramedic ambulance. Fire Station 50 is staffed with five firefighters daily and three of the five firefighters are paramedics. Fire Station 69, located at 71752 Gerald Ford Drive, is responsible for covering the northern portion of Rancho Mirage, and is equipped with one medic engine and one medic unit. The City's Fire Department is made up of 27 sworn, 2 full time non-sworn and 1 part time non-sworn personnel. Five firefighters are staffed at both of these stations daily and three of the five firefighters are paramedics.

## 4.16.4 Project Impact Analysis

### Thresholds of Significance

The following standards and criteria for establishing significance of potential impacts related to wildfire hazard impact were derived from the CEQA Guidelines, Appendix G. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, development of the project would result in a significant impact if it would:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
c. Require the installation or maintenance of associated infrastructure (such as roads fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

### Methodology

In order to determine whether the significance criteria outlined in Appendix G in the CEQA Guidelines applies to the project property, state and local fire maps were examined to determine whether the proposed project is located in or near a state responsibility area, or lands classified as very high fire hazard severity zones. As stated in Section 4.16.2, *Existing Conditions*, in this Wildfire Section, the Porcupine Creek Retreat Specific Plan project property is located approximately a mile northeast from a high and very high fire hazard severity zone in a state responsibility area, according to CAL FIRE's fire map. However, the CAL FIRE high fire maps also located the project site, and surrounding area, as a non-very high fire hazard severity zone within a local responsibility area. In addition to the state fire maps consulted for this analysis, Exhibit 27, *Fire Threat*, in the Rancho Mirage General Plan, designates the project property in an area with a moderate fire threat.

Since the CAL FIRE high fire map identified the project's location near a high and very high hazard severity zone in a state responsibility area, the following discussion analyzes the potential impacts of wildfire and the development of the Porcupine Creek Retreat Specific Plan project.

### Project Design Features

Proposed building locations and design will be consistent with applicable state and local construction requirements and standards. Project design features regarding wildfires are analyzed further in the subsequent discussions of project impacts.

## Project Impacts

### *a. Substantially impair an adopted emergency response plan or emergency evacuation plan*

The Riverside County Office of Disaster Preparedness is the responsible lead agency for the coordination of the various agencies in the event of an emergency. In Rancho Mirage, Fire Station 50, located at 70801 Highway 111, serves as the base of operations for emergency response. In addition to City staff assigned to specific tasks, ranging from management and coordination to field operations, the City has agreements with local contractors to augment public agency resources and capabilities.

In September 2014, the Rancho Mirage City Council approved and adopted Resolution 2014-42 which amended the previous General Plan to incorporate, as an appendix, the Rancho Mirage Local Hazard Mitigation Plan (LHMP). The purpose of the LHMP is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The plan identifies vulnerabilities, provides recommendations for prioritized mitigation actions, evaluates resources, identifies mitigation shortcomings, and provides future mitigation planning and maintenance of existing plan.

The primary evacuation routes in the City of Rancho Mirage are identified as Interstate 10 and Highway 111 along with primary and minor arterial streets serving as secondary routes. Minor arterial streets throughout the City includes Bob Hope Drive, Frank Sinatra Drive, Country Club Drive, Gerald Ford Drive and Da Vall Drive. This is indicated in Exhibit 8, Circulation Roadway Plan, in the Rancho Mirage General Plan. Highway 111 is approximately 0.50 miles northeast of the project's primary vehicular access point on Dune View Road.

The project property currently operates as the Porcupine Creek private estate and golf course. There are two existing vehicular access points to the Porcupine Creek property. The primary access point is located at Dunes View Road and is intended for use by the owner and guests. Secondary vehicular access to the project site is located at the northern point, at Mirage Road, which is intended as the service and delivery entry. The third point of access is located at the southeastern corner of the site at Magnesia Falls Drive. This entrance currently provides maintenance, construction, special purpose, and emergency service access to the site. Each point of access is gated and only allows private access. The entrance at Magnesia Falls Drive will continue to allow vehicular access to emergency vehicles and personnel. These access points currently exist to serve the Porcupine Creek property, and additional roads are not proposed for the project.

The Porcupine Creek Retreat project will not substantially impair an adopted emergency response plan or emergency evacuation plan since the property is currently developed and operates as a

private residence. Further development will occur within the Porcupine Creek Retreat Specific Plan boundaries, but off-site improvements are not proposed. Therefore, no impacts are anticipated.

### *b. Slope, prevailing winds, and other factors that exacerbate wildfire risks could potentially expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire*

According to the CAL FIRE website, weather, topography, vegetation and wind exacerbate wildfires. The Coachella Valley's Mediterranean climate, which is defined by wet winters and hot summers, is ideal for the spread of wildfires because the winters that experience high rainfall, result in the annual growth of grasses and plants that dry out during the hot summer months. This dry vegetation provides fuel for wildfires in the summer and autumn seasons, when the areas is intermittently impacted by Santa Ana conditions, which includes hot, dry winds.

The project property is located on the southern portion of the City of Rancho Mirage, adjacent to the Santa Rosa Mountains. The steep conditions of the mountains are typically ideal for the spread of wildfires. However, the Santa Rosa Mountains are composed of material that is steep, rocky and dry, which does not allow dense vegetation to grow. The lack of vegetative cover on the slopes makes these areas unlikely for the spread of wildfires. Therefore, the areas adjacent to the Santa Rosa Mountains, including the project property, are not likely to result in a wildfire.

The geomorphology of the Coachella Valley, its extreme aridity, and the marine air masses funneled from the west through the San Gorgonio Pass, create strong and persistent winds in the region. Generally, these conditions force prevailing winds in the Coachella Valley in a northwest to southeast direction. High winds exacerbate wildfires by supplying oxygen to fire, preheating the fuels in the path of the fire, and transporting embers ahead of the flaming front. According to the Rancho Mirage General Plan Environmental Impact Report (EIR), the City is susceptible to high winds and its secondary effects; however, locations at the base of the mountains are sheltered from these windy conditions. The project site, as stated throughout, is located immediately north, south, and east of the Santa Rosa Mountains, and therefore, is protected from windy conditions. The project's location allows the project to be sheltered from windy conditions, therefore, it is not likely that wind will exacerbate wildfire conditions at the project site.

The project property currently operates as a private estate and golf course, with a main residential house and multiple villas and casitas. The northwestern property boundary is separated from the slopes of the Santa Rosa Mountains by a private paved vehicular access road and landscaping, as well as CVWD's concrete flood control channel. The approximately 25,000-square-foot main residence and adjacent casitas, approximately 17,000 square feet of guest villas, and approximately 24,500 square feet of temporary, accessor and shade structures. Currently, the total building areas on the estate is approximately 66,500 square feet. The onsite structures are dispersed throughout the property and

surrounded by landscaping and the golf course. The golf course acts as a buffer, separating the existing structures from the Santa Rosa Mountain slopes and surrounding properties.

The project will maintain the established buffer conditions which include, an open space buffer of 250 feet along the northeasterly boundary of the project site and additional landscaped buffers along the western boundary and the southern boundary. Development of structures on the slopes of the Santa Rosa Mountains, along the property's southern boundary would not occur because this portion of the property has been excluded from the Porcupine Creek Retreat Specific Plan. The landscaped areas and areas with short, maintained grass (i.e., the golf course) on the proposed project site create a buffer separating the existing and proposed structures from the natural mountain slopes and the surrounding residential properties. These buffers also act as a fuel break for a fire, since short, maintained grass does not provide adequate vegetation for a wildfire to continue.

As analyzed in this discussion, wildfires are not likely in the project area. This is due to the steep and rocky environment of the Santa Rosa Mountains, which is not conducive for the growth of vegetation fuel for wildfires. Additionally, windy conditions, that would typically exacerbate wildfires, do not occur at the project property, due to its location against the Santa Rosa Mountains. Finally, the project has generous buffers between the natural habitat areas and all structures. Therefore, it is concluded that wildfires, and factors that exacerbate wildfires, such as vegetation fuel and prevailing winds, are not located at or near the project property. As a result, development of the project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Less than significant impacts are anticipated.

### *c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment*

The project site is currently developed with a golf course and private residence, identified as Porcupine Creek. The Porcupine Creek Retreat Specific Plan project proposes up to 50 studio, single bedroom, multi-bedroom "keys", as well as upgrades to the main house, a new restaurant and dining deck, and upgraded spa complex, additional casitas and villas, upgraded and additional resort and hotel related facilities, and a rerouted 18-hole golf course. The existing dining, golf, and spa facilities will be available to retreat guests, but will not be open to the general public.

The Porcupine Creek Retreat Specific Plan area is currently developed and served by roads, electrical utilities, natural gas utilities, water sources and other utilities and infrastructure. The project site is bordered by existing residential uses, and roadways to the east, and the natural Santa Rosa Mountain slopes to the north, west, and south. The project site proposes to augment the existing private network of water lines within the project boundary to accommodate new construction. The existing

connection to the CVWD public water system on Dunes View Road will remain in its existing location. Golf and open space areas are currently irrigated using groundwater from an off-site well.

An existing network of private driveways constructed in accordance with City engineering and fire access standards serves the various buildings on site. Primary vehicular access to the site is taken from a manned, gated entry at Dunes View Road situated at the center of the property's northern boundary. The existing entry is intended for use by the owner and guests and is enhanced with decorative concrete pavers, entry gates, a guard house, and landscaped areas. Staff and deliveries arrive at a manned/gated secondary entrance off Mirage Road at the northern corner of the site. Additionally, a third access point off Magnesia Falls Drive currently provides maintenance, special purpose and emergency service access to the site.

The proposed retreat will be developed to ensure state, regional and local standards regarding the structural fire safety are followed. The most current California Fire Code and Building Codes will be implemented at the project property. This includes implementing means of egress and fire-resistance-rated construction materials and design to ensure the safety of guests and structures against fires.. Furthermore, development of the Porcupine Creek project will not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impact to the environment. Less than significant impacts are expected.

## *d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes*

Wildfires that burn along hillsides and slopes commonly result in landslides after the occurrence of rain. Vegetation and their root systems stabilize the soils along hillsides; however, a wildfire can burn the vegetation and their roots, leaving bare, dry, and unstable soil. This bare condition of the soil makes the hillside more susceptible to landsliding after the occurrence of a rain event. Additionally, bare, dry soil, absent from vegetation, has a faster runoff rate, and is less permeable than soils with vegetation. Therefore, dry, unvegetated soils are more likely to lead to downstream flooding from increased runoff rates, after a rain event.

The project site is located adjacent to the Santa Rosa Mountains and currently operates as a private residential estate and golf course. Typically, areas located near steep slopes are more likely to be impacted by slope instability and rockfalls. The project's susceptibility to landslides and slope instability after a fire is discussed as follows:

### *Proposed Project Features*

As stated previously, the project property is currently developed with a golf course and private residence and villas. The proposed development within the project site will not be located adjacent

to the Santa Rosa Mountain slopes. Existing mountain slopes are adjacent to landscaped areas, including the modified golf course, will provide a buffer between the structures and the mountain slopes, and decrease the likelihood of the structures being impacted by rockfalls or landslides. The closest proposed structure is located at the southwest corner of the site, east of the irrigation reservoir/lake. This proposed structure is located approximately 52 feet north of the toe of slope of the Santa Rosa Mountain, and will be separated by a buffer including, an existing actively irrigated area and an existing golf cart path.

### *Proposed Grading and Drainage*

Proposed grading is intended to maintain the existing site elevations with modifications to accommodate the proposed expansions. Proposed grading will result in the creation of building pads for the construction of additional structures such as casitas and villas. The proposed grading will result in ground elevations which are similar to existing grades. No grading is proposed within the open space buffer area (along the eastern property boundary) other than what is necessary to adjust retention areas or provide for foundations of accessory structures.

Project grading is also designed to achieve positive surface flows and protect all structures and physical improvements from the 100-year storm, surface runoff, soil erosion and sedimentation both during and after construction. In addition, the grading design will balance onsite earthwork (cut and fill) taking into account excavation generated by site grading and grades needed to achieve minimum cover for underground gravity sewer. The site generally drains south to north and south to east and flows are directed to the existing golf course. Onsite drainage will be achieved in a similar manner to the existing condition, through a series of lakes, low points, and retention areas throughout the project site designed to capture surface runoff from the 100-year storm. An in-depth analysis of the drainage system proposed for the project is discussed in **Section 4.9, *Hydrology and Water Quality***, of this Draft DEIR.

The grading and drainage proposed for the project will not create slopes within the property boundaries that will not increase the property's susceptibility to landslides or downstream flooding. Additionally, the project is designed to capture surface runoff from the 100-year storm.

### *Wildfire Risk*

According to fire threat maps corroborated by the City of Rancho Mirage General Plan, and the CAL FIRE maps, the Santa Rosa Mountains and adjacent areas have an increased threat to wildfires due to the naturally steep topographic condition of the mountain range. Exhibit 27, *Fire Threat*, in the RMGP designates these areas, including the project property, as having moderate to high fire threat. However, as discussed previously, the Santa Rosa Mountains are steep and rocky and do not provide an environment conducive to the growth of dense vegetation, and wildfire risk in this area is generally considered low. Therefore, as a secondary effect, downslope or downstream flooding or landslides

caused by post-fire slope instability or drainage changes is not anticipated to occur at the project property, and less than significant impacts are anticipated.

## 4.16.5 Cumulative Impacts

There are no cumulative impacts associated with the proposed project related to wildfires, since the project is currently developed and supplied with water infrastructure, emergency service access routes, and supporting infrastructure. Although the location of the Porcupine Creek Retreat Specific Plan project area lies adjacent to the slopes of the Santa Rosa Mountains, impacts from wildfires are not anticipated to occur at the project property. This is due to the rocky conditions of the Santa Rosa Mountains, which does not provide an adequate environment for dense vegetation to grow. Therefore, the relatively sparse vegetation on the mountain does not provide fuel for wildfires to spread. Additionally, the project's location adjacent to the Santa Rosa Mountains protects the site from wind, and therefore is not impacted by windy conditions that could exacerbate wildfires.

Any new development or redevelopment would be required to comply with minimum standards for materials and material assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in wildland-urban interface areas as required by the California Fire Code. Additionally, the Rancho Mirage General Plan states that the City shall conduct long-range fire safety planning, including enforcement of stringent building, fire, subdivision and other Municipal Code Standards, improved infrastructure, and mutual aid agreements with other public agencies and the private sector. These policies and regulations, in conjunction with the existing supporting infrastructure at the Porcupine Creek property, would reduce cumulative impacts associated with wildfires to a less than cumulatively considerable level.

## 4.16.6 Mitigation Measures

No Mitigation Measures are required.

## 4.16.7 Level of Significance After Mitigation

No Mitigation Measures are required.

## 4.16.8 Resources

1. A Prepared and Resilient Fire and Emergency Medical Services Strategic Plan Fiscal Years 2019-2023, US Fire Administration, https://www.usfa.fema.gov/downloads/pdf/publications/strategic_plan_2019-2023.pdf accessed April 2020.

2. Ask the scientist: How can the weather spark and spread wildfires?, NOAA, Sept. 2018, https://www.noaa.gov/stories/ask-scientist-how-can-weather-spark-and-spread-wildfires accessed May 2020.
3. County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan, July 2018, https://www.rivcoemd.org/Portals/0/FINAL%20PUBLIC%20VERSION%20Riv_Co_%202018%20Multi%20Jurisdictional%20Local%20Hazard%20Mitigation%20Plan.pdf accessed May 2020.
4. Fire Hazard Severity Zones Maps, CAL FIRE, November 2007, https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/ accessed April 2020.
5. Post-Fire Flooding and Debris Flow, USGS California Water Science Center, https://www.usgs.gov/centers/ca-water/science/post-fire-flooding-and-debris-flow?qt-science_center_objects=0#qt-science_center_objects, accessed April 2020.
6. Post Wildfire Flash Flood and Debris Flow Guide, National Weather Service, https://streetsla.lacity.org/sites/default/files/DebrisFlowSurvivalGuide.pdf, accessed April 2020.
7. Safety Element, Rancho Mirage General Plan.
8. US Fire Administration website, About Us, https://www.usfa.fema.gov/about/index.html, accessed April 2020.
9. Wildfire Smoke: A Guide for Public Health Officials, August 2019, https://www3.epa.gov/airnow/wildfire-smoke/wildfire-smoke-guide-revised-2019.pdf accessed May 2020.

# 5.0 Other CEQA Sections

## 5.1 Purpose

This chapter of the Draft EIR addresses the additional content requirements of the State CEQA Guidelines that are not included in other chapters. CEQA Section 21100 states that all lead agencies shall prepare, or cause to be prepared by contract, and certify the completion of, an environmental impact report on any project which they would propose to carry out or approve that may have a significant effect on the environment. Section 21100 requires that the EIR discuss all project-related significant effects on the environment, which is found in **Chapter 4**, and **Sections 4.1** through **4.16** of this Draft EIR. However, CEQA Guidelines also requires a section of the document to discuss significant unavoidable impacts, significant irreversible impacts (per Section 21100 (b)(2)), as well as energy, and growth-inducing impacts (per Section 15126.2). These topics are discussed in this chapter.

## 5.2 Significant and Unavoidable Impacts

Per Section 15126.2 (c) of the CEQA Guidelines, the EIR shall describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described. Accordingly, this section provides a summary of significant environmental impacts of the proposed project that cannot be mitigated to a less than significant level.

### *Project Analysis*

As determined in Chapter 4, **Sections 4.1** through **4.16**, the project would not create impacts that are significant and unavoidable. All impacts identified for the Porcupine Creek Retreat Specific Plan project could be mitigated to less than significant levels through adoption of the specific mitigation measures specified in those sections. Therefore, the project will have no significant and unavoidable impacts and further discussion is not required.

## 5.3 Significant Irreversible Environmental Changes

Per CEQA Guideline Section 15126.2 (d), uses of nonrenewable resources during construction and operation of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents

associated with a project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

### *Project Analysis*

The irreversible and irretrievable commitment of resources is the permanent loss of resources for future or alternative purposes. Irreversible and irretrievable resources are those that cannot be recovered or recycled or those that are consumed or reduced to unrecoverable forms. The proposed Porcupine Creek Retreat Specific Plan project would result in moderate irreversible and irretrievable commitments of energy and material resources (during construction and operation) of the following:

- Construction materials
- Energy in the form of electricity, natural gas, and petroleum

The use of these nonrenewable resources is expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Construction activities would not result in inefficient use of energy or natural resources. Additionally, long-term operations would not result in inefficient consumption of energy and natural resources. Impacts would be less than significant and mitigation measures are not required. See **Section 4.5, *Energy Resources***, of this Draft EIR for further discussion.

## 5.4 Energy

Per Section 15126.2 (b) of the CEQA Guidelines, if analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation, or utilities in the discretion of the lead agency.

### *Project Analysis*

As determined in **Section 4.5, *Energy Resources***, the project would not result in the wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources, and mitigation is not required. See **Section 4.5, *Energy Resources,*** for in-depth analysis.

## 5.5 Growth-Inducing Impacts

Per Section 15126.2 (e), the EIR shall discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly,

in the surrounding environment. Included in this are projects which would remove obstacles to population growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

### *Project Analysis*

As stated throughout this Draft EIR, the proposed project occupies approximately 191-acres of the existing 230-acre Porcupine Creek Estate. The project site currently operates as the Porcupine Creek, private estate with a main house, multiple villas and recreational facilities, as well as a golf course. Access to the property is currently restricted to the owner, invited guests, management, groundskeepers, maintenance employees, and service employees.

The project proposes the addition of 27 keys (for a total of 50 keys) and various upgrades to the site. Proposed upgrades would incorporate a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. The rerouting of the 18-hole golf course intends to maintain the existing fairways with some minor adjustments, all located within the developed estate grounds and bounded by the existing roadways and cart paths. These additions could expand the total building area on the estate from approximately 66,500 square feet to approximately 250,000 square feet. Consistent with existing practices, the proposed, upgraded dining, golf, and spa facilities will be available to retreat guests only.

Prior to the preparation of the Draft EIR, an Initial Study was prepared using Appendix G, Environmental Checklist Form, in the California Environmental Quality Act (CEQA) Guidelines. Appendix G assesses the potential impacts associated with population and housing at the project property. The Porcupine Creek Retreat Specific Plan Initial Study is included in **Appendix A** of this Draft EIR. Following the screening criterion related to population and housing in the Initial Study, it was determined that the proposed project may encourage some limited relocation for employment, however, the additional number of anticipated employees is relatively small, given the maximum retreat size of 50 keys. The project currently has a residential component that will be modified, and additional keys are proposed for temporary guests. No new extensions of roads or other infrastructure will be associated with the project, and the project will not induce substantial population growth.

Upon initiation of operational activities, the retreat project would employ a minimal to moderate increase of onsite staff. As determined in the Porcupine Creek Retreat Initial Study, implementation of the proposed project would not substantially increase population growth in the surrounding region because it would not require or facilitate construction of new housing. The proposed project would not install or expand public infrastructure facilities, leading to the increase of new development, or housing growth. The proposed project would not substantially affect the ability of public service

providers to serve their existing customers, nor would it require the construction of new off-site facilities to serve the proposed project. The employment growth expected with project implementation would be minor, and the proposed project would not extend infrastructure and public services to serve areas outside of the project site. Therefore, the proposed project would not contribute to substantial population or housing growth, and there is no need to further analyze project-related growth-inducing impacts.

# Chapter 6.0 Effects Not Found to be Significant

As previously discussed in Section 1.0: Introduction, the City of Rancho Mirage (City) is the lead agency for the planning and environmental review of the proposed Porcupine Creek Retreat Specific Plan project ("project"). The City has prepared this Draft Environmental Impact Report (Draft EIR) in compliance with the California Environmental Quality Act (CEQA) Guidelines, including Section 15128 of the CEQA Guidelines which requires a brief description of any possible significant effects that were determined not to be significant and were not analyzed in detail within the environmental analysis. Therefore, in compliance with CEQA Guidelines, this section, Effects Not Found to be Significant, is included in this Draft EIR.

The latest CEQA Guideline thresholds, established in the 2020 CEQA Guidelines Appendix G Checklist, was used in the analysis of this Draft EIR. The following discussion presents the analysis of the insignificant effects related to aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and utilities and service systems, per the 2020 CEQA Guidelines.

## 6.1 Aesthetics

***Threshold b: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

The proposed Porcupine Creek Retreat Specific Plan project occurs within the existing private Porcupine Creek estate, adjacent to the Santa Rosa Mountains. A review of the California Scenic Highway Mapping System web site operated by Caltrans, revealed that the project is not located adjacent to or near any state or county, eligible or designated scenic highway. Interstate 10 and Highway 111 are the two freeways that serve the City of Rancho Mirage. These segments are regional routes that allow access to the City, however, they are not designated as scenic highways in the California State Scenic Highway Program, although Caltrans classifies Highway 111 west of its intersection with State Highway 74 as an "Eligible State Scenic Highway – Not Officially Designated". As such, the proposed site plan would not result in adverse impacts to scenic resources within a state scenic highway. Construction of the project site is not anticipated to substantially damage scenic resources, including trees, rock outcroppings, or historic buildings within a state scenic highway. No impacts are anticipated.

## 6.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

***Threshold 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?***

The Porcupine Creek property is classified by 2016 California Farmland Mapping and Monitoring Program (FMMP) as "Urban and Built-up Land". Surrounding areas to the east are also designated as Urban and Built-up Land, while areas north, west and south of the project are designated as "Other Land". No areas within the City of Rancho Mirage are designated or zoned for agricultural use. Therefore, implementation of the project would not involve changes that would result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to nonagricultural uses.

***Threshold b: Conflict with existing zoning for agricultural use, or a Williamson Act contract?***

The General Plan land use and zoning designation for the project site includes Very Low Density Residential (R-L-2), Private Open Space (OS-PV), Floodways and Drainage Channels (OS-W) and Mountain Reserve (MR). As a part of the entitlement process, the project will submit a General Plan Zoning Map Amendment (GPZMA) that will amend these General Plan land use and zoning designations to "Specific Plan" with an underlaying zoning designation of Resort Hotel (Rs-H).

***Threshold c: Conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production?***

The project site is currently developed and operates as a private estate, with amenities including a 19-hole golf course, tennis courts, pool, and spa. As stated in the previous discussion, Very Low Density Residential, Private Open Space, Floodways and Drainage Channels and Mountain Reserve are the property's land use designations, not forest land or timberland. Accordingly, no impacts are anticipated.

***Threshold d: Result in the loss of forest land or conversion of forest land to non forest use?***

As previously discussed, the project site currently operates as a private estate with recreational uses. The project would not result in the loss of forested land or result in the conversion of forest land to non-forest use since the site is already developed. No impacts are anticipated.

***Threshold e: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

The project site is currently developed and operates as a private estate with recreational uses. The Porcupine Creek Retreat Specific Plan proposes the development of a wellness retreat property that will involve the modification of the main house, up to 50 studio, single-bedroom, and multi-bedroom "keys", a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, upgraded and additional wellness retreat and hotel related facilities, and a rerouted 18-hole golf course. The Porcupine Creek Retreat Specific Plan project will occur within the current boundaries of the Porcupine Creek estate. Project implementation will not involve other changes that could result in the conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use since the project property is not designated as farmland or used as agricultural land. No impacts are anticipated.

## 6.3 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

***Threshold e: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

Implementation of the wellness retreat facilities is not expected to result in other emissions that would adversely affect a large number of people during construction or operation.

The proposed wellness retreat facilities are not expected to include operations commonly known to generate odors, such as wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, or food packaging facilities, as no such industrial uses are permitted under the proposed Specific Plan. As such, the project is not expected to result in odors or other emissions adversely affecting nearby neighbors or any substantial number of people, and less than significant impacts are anticipated.

## 6.4 Biological Resources

***Threshold c: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The project site has been fully impacted by development and does not contain federally protected wetlands, marshes or other natural drainage features. No blue-line stream corridors (streams or dry washes) are shown on U.S. Geological Survey maps for the project site and there are no botanical indicators of such corridors. As a result, implementation of the proposed project would not result in the direct removal, filling or other hydrological interruption to any of these resources.

***Threshold 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?***

The project's existing development and immediately surrounding residential and public uses (hiking trail, public park and elementary school), do not present ideal conditions for wildlife corridors or native wildlife nursery sites. The projects eastern boundary is separated from the Santa Rosa Mountains by a flood control channel and a paved road. A sheep fence has also been erected to protect the Big Horn Sheep by preventing any access to the property, and no development activities will occur outside the existing fencing. Impacts to wildlife corridors and wildlife nursery sites would be less than significant.

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

The project lies within the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) which outlines policies for conservation habitats and natural communities and is implemented by the City of Rancho Mirage. The project is consistent with the Goals and Policies set forth in the City of Rancho Mirage General Plan Open Space and Conservation Element and will comply with the CVMSHCP. There are no other unique local policies or ordinances protecting biological resources that would cause a conflict. Therefore, no impacts would occur.

***Threshold 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?***

As discussed above, the City of Rancho Mirage is a participant of the CVMSHCP. This plan outlines policies for conservation habitats and natural communities and is implemented by the City of Rancho Mirage. The project site is not located within a Conservation Area under the CVMSHCP. The project complies with the CVMSHCP and Section 3.29.147 of the Rancho Mirage Municipal Code that implements the plan within the City. Therefore, no impacts would occur.

## 6.5 Cultural Resources

***Threshold c: Disturb any human remains, including those interred outside of formal cemeteries?***

As discussed throughout this document, the site has been previously disturbed, graded and developed as a residential estate and private golf course. The project is not anticipated to disturb any human remains, including those interred outside of formal cemeteries, because no development activities are proposed outside the footprint of the prior development activities. In addition, the project would comply with California Health and Safety Code Section 7050.5, and the CEQA Guidelines Section 15064.5, which require that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. Mandatory compliance with these state law provisions would ensure less than significant impacts. No further analysis is needed.

## 6.6 Geology and Soils

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

The Porcupine Creek estate is currently served by sewer. Per the Porcupine Creek Retreat Specific Plan, the project proposes to augment the private network of sewer lines to accommodate new construction. This upgraded interior system will continue to use the existing sewer connection on Dunes View Road in addition to constructing two additional sewer connections to the public sewer system. No septic systems are proposed as part of this project. Therefore, no impacts are anticipated, and no further analysis is necessary.

## 6.7 Hazards and Hazardous Materials

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

The project is not located within an airport land use plan or private airstrip. The Palm Springs International Airport is located approximately 6.25 miles to the northwest and the Bermuda Dunes Airport is located approximately 7 miles northeast of the project. As a result, the project is located outside each of the airports' influence and planning area. Flights approaching and departing the Palm Springs International Airport and Bermuda Dunes Airport may fly over the City and the project site with intermittent frequency; however, impacts are not anticipated.

## 6.8 Land Use and Planning

***Threshold a: Physically divide an established community?***

The project property currently operates as a private estate with golf course and recreational amenities. The Porcupine Creek property lies north and east of the Santa Rosa Mountains and west of the Magnesia Falls Cove, a Medium Density Residential neighborhood. The project is proposing the construction and renovation of the site as an exclusive retreat with up to a total of 50 studio, single-bedroom, and multi-bedroom keys, and associated upgrades, which includes a modified main house, a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, additional retreat facilities and amenities, and a rerouted 18-hole golf course. The proposed project will remain within the boundaries of the existing Porcupine Creek property. No offsite improvements are anticipated. Therefore, project implementation is not anticipated to divide an established community.

## 6.9 Mineral Resources

***Threshold a/b: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

The mineral resources that attribute to the Coachella Valley desert floor primarily consists of sand, gravel (aggregate) and other important mineral deposits that have eroded from the surrounding mountains and hills. To ensure the protection of important mineral resources, the Surface Mining and Reclamation Act of 1975 (SMARA) developed mineral land classification maps and reports to identify the presence or absence of suitable sources of aggregate (sand, gravel or stone deposits) into Mineral Resource Zones. According to a Classification Map, the project site is designated within Mineral Resource Zone 3 (MRZ-3). This specific zone identifies areas where the significance of mineral resources are undetermined based on available information, and thus contain no known mineral resources of significant value.

Similar to the Mineral Resources Land Classification Map, the Rancho Mirage General Plan Environmental Impact Report (EIR) also acknowledges the lack of significant mineral resources on the project site in their Mineral Resource Zones Map (Figure 5.9-1, 2005). According to this map, there is no evidence that a significant mineral deposit is present at the project site.

Accordingly, no impacts are expected as a result of project implementation.

## 6.10 Noise

***Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

The closest airport to the project site is the Palm Springs International Airport, located at 3400 East Tahquitz Canyon Way, approximately 6.25 miles from the Porcupine Creek property. The project site is located outside of the 70, 65 and 60 CNEL noise contours associated with the airport facility. Furthermore, the Palm Springs Airport Land Use Plan does not identify the project as being located within its planning area. Due to the project's distance from the Palm Springs International Airport, the project site is not anticipated to expose people residing or working in the project area to excessive noise. No impacts are expected.

## 6.11 Population and Housing

***Threshold a: Induce substantial unplanned 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)?***

As previously discussed throughout this document, the project is proposing the construction and renovation of the approximately 230-acre Porcupine Creek site. The proposed wellness retreat will contain up to a total of 50 studio, single-bedroom, and multi-bedroom "keys", modify the main house, construct a new restaurant and dining deck, upgrade the spa complex, add additional casitas and villas, upgrade and add wellness and hotel related facilities, and reroute the golf course. The project currently provides vacation housing to the owner of the Porcupine Creek property, and conversion to a wellness retreat is not anticipated to induce substantial unplanned population growth in the area.

The proposed project may encourage some limited relocation for employment; however, the increase in the number of employees would be relatively minor. The project currently has a residential component that will be modified, and additional keys are proposed for temporary guests. No new extensions of roads or other infrastructure will be associated with the project, and the project will not induce substantial unplanned population growth. Therefore, there will be no impacts.

***Threshold b: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

The proposed Porcupine Creek Retreat Specific Plan will not displace existing housing, affordable housing, or people. No impacts are expected.

## 6.12 Public Services

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

### *Threshold a: Schools?*

The City of Rancho Mirage is served by two school districts; the Palm Springs Unified School District (PSUSD) serves the majority of the City, and the Desert Sands Unified School District (DSUSD) serves the portion of the City that lies south of Frank Sinatra and east of Bob Hope Drive. The proposed project site is within the boundary of the PSUSD. The project site is a private residential estate that is not utilized as a primary residence and does not generate school age children. The project is proposing to develop up to 27 additional studio, single bedroom, and multi-room keys as part of an exclusive retreat. Occupancy of these additional rooms would be transitory, and any additional employment generated by the project would not be expected to draw a substantial number of new residents that would generate school age children requiring public education.

Although the project will not create a direct demand for school services, Assembly Bill 2926 and Senate Bill 50 (SB 50) allow school districts to collect "development fees" for all new construction for residential/commercial and industrial use. At the time of writing, developer fees are $3.79/sq.ft. for residential and $0.61/ sq.ft for commercial. Monies collected are used for construction and reconstruction of school facilities. The project applicant will be required to contribute to these fees and there would be no impacts to schools. No further analysis is needed.

### *Threshold a: Parks?*

The City of Rancho Mirage provides both public and private parks, open space and multi-city recreational facilities with various amenities. As discussed in the Recreation Section of this EIR, the proposed project would not create additional demand for public park facilities, nor result in the need to modify existing or construct new park facilities. Porcupine Creek provides guests with convenient access to a variety of high-quality open space and recreational amenities without leaving the property. The project proposes to build upon existing open space and recreational amenities to enhance the retreat experience. Therefore, no impacts to parks would occur.

### *Threshold a: Other Public Facilities?*

No increase in demand for government services or other public facilities is expected beyond those discussed in this section.

## 6.13 Recreation

***Threshold a/b: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated and does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

The City oversees five parks that are a mix of mini and local parks. The Porcupine Creek property currently operates as a private residence and golf club and is not open for public access. Recreational uses proposed for the project includes a new restaurant and dining deck, an upgraded spa complex, additional casitas and villas, upgraded and additional wellness and retreat related facilities and a rerouted 18-hole golf course. The dining, golf, and spa facilities will be available to retreat guests only.

The project's recreational amenities are designed to meet the needs of retreat guests such that use of existing City parks is not anticipated. Accordingly, no increased use of existing park facilities that could accelerate their physical deterioration is anticipated.

The project is not anticipated to increase the use of existing parks since the project is proposing private recreational facilities to meet the needs of all guests, and the modest increase in jobs created by the wellness retreat is not expected to attract any meaningful increase in residents to the City who would use the existing park facilities. No impacts are anticipated.

## 6.14 Utilities and Service Systems

***Threshold a: Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

The project site is fully developed and currently receives water, wastewater, electrical power, natural gas and telecommunications services. The sites storm drain system includes facilities which have been sized to provide enough storage for the 100-year controlling storm event. The project would extend utilities to the new construction areas and the extension of these services will occur within the projects existing footprint. The drainage concept is intended to utilize and augment existing drainage features and infrastructure. A series of lakes, low points, and retention areas throughout the project site are designed to capture surface runoff from the 100-year storm and convey approved quantities to the adjacent regional stormwater facilities. No new or expanded off-site water, wastewater, electric power, natural gas, or telecommunications facilities will need to be constructed or relocated. Therefore, impacts would be less than significant. No further analysis is needed.

### *Threshold e: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The project will comply with all applicable solid waste statutes and guidelines. All development is required to comply with the mandatory commercial and multi-family recycling requirements of Assembly Bill 341. The project will also comply with the recycling requirements of Cal Green and develop a waste management plan that will include diverting at least 50% of construction and demolition material fill from landfills. No impacts are expected relative to applicable solid waste statues and regulations.

# Chapter 7.0 Alternatives

## 7.1 Introduction

This section of the Draft Environmental Impact Report ("Draft EIR") provides a comparative analysis of the environmental effects of alternatives to the proposed Porcupine Creek Retreat Specific Plan ("Specific Plan") project ("project"). This analysis has been prepared in accordance with the California Environmental Quality Act (CEQA) Guidelines. Per CEQA, it is required that an environmental impact report (EIR) describe a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant environmental impacts of the project. An EIR must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. This section identifies and describes alternatives to the proposed project, evaluates the environmental impacts that would result from each of these alternatives, and compares these with the proposed project, as required by CEQA.

Key provisions of the State CEQA Guidelines (Section 15126.6) relating to this alternative's analysis are summarized by the following:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be costlier.
- The No Project Alternative shall be evaluated along with its impact. The No Project analysis shall discuss the existing conditions and buildout of previously entitled buildings through year 2020. Additionally, the analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure.
- The range of alternatives required in an 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 effects of the project.
- Only alternative locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for the inclusion in the EIR. However, if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR.
- Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan

consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

## 7.2 Project Objectives

The State CEQA Guidelines requires an EIR to include a statement of objectives that addresses the underlying purpose of the project.

As referenced in **Chapter 3, *Project Description***, of this Draft EIR, the Porcupine Creek Retreat Specific Plan project is proposing the development of a retreat occupying approximately 191 acres of the 230-acre Porcupine Creek private estate, in the City of Rancho Mirage. The project proposes to reposition Porcupine Creek as an exclusive retreat with a total of up to 50 studio, single-bedroom, and multi-bedroom units ("keys"). Proposed upgrades would incorporate a modified main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. The rerouting of the 18-hole golf course intends to remain on the existing fairways with some minor adjustments, all located within estate grounds and bounded by the existing roadways and cart paths. These additions could expand the total building area on the estate from approximately 66,500 square feet to approximately 250,000 square feet. Consistent with existing practices, the proposed, upgraded dining, golf, and spa facilities will be available to retreat guests only and not open to the general public.

As shown in **Exhibit 3.4, *Conceptual Land Use Plan***, the project is proposing a Specific Plan land use designation with an underlying zoning designation of Resort Hotel. Two basic land uses within the Specific Plan area are proposed, including Estate/Retreat and Flood Control Channel.

Development of the Porcupine Creek Retreat Specific Plan project would require the implementation of the following proposed entitlements:

- Adoption of the **Porcupine Creek Retreat Specific Plan** to provide a comprehensive development concept for the implementation of the Retreat;
- Approval of a **Development Agreement (DA)** to establish special terms beneficial and mutually agreeable to both the City and the applicant to facilitate project development;
- Approval of the **General Plan Zoning Map Amendment (GPZMA)** to change the "Very Low Density Residential (R-L-2)" and "Private Open Space (OS/PV)" to "Specific Plan" with and underlaying zoning designation of "Resort Hotel (Rs-H)";

- Approval of a **Preliminary Development Plan (PDP)** to demonstrate the design guidelines required by the Specific Plan and to ensure quality architecture, landscape, and site design that complements existing estate improvements;
- Approval of a **Lot Line Adjustment (LLA)** to adjust existing parcel lines to create a single legal parcel for the Specific Plan property and separate legal parcels for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)/Measure V Mountainous Lands located outside the Specific Plan and excluded from the project entitlements specified above.

Pursuant to the State CEQA Guidelines, Section 15124(b), the Porcupine Creek Retreat Specific Plan project evaluated various design features of the project including engineering feasibility, water efficiency, General Plan goals, and compatibility with surrounding land uses during the planning process. In order to ensure the functional integrity, economic viability, environmental sensitivity, and positive aesthetic contribution of the Specific Plan, the following project objectives were established:

- Provide a comprehensive land use plan that establishes development standards, land use regulations, and programs to guide the orderly transition/development of the property.
- Promote quality development consistent with the goals and policies of the Rancho Mirage General Plan.
- Repurpose Porcupine Creek as an exclusive, world-class Retreat.
- Rezone the property to permit a Retreat capable of generating Transit Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage.
- Maintain flexibility to respond to market conditions and evolving design needs.
- Ensure the high standards outlined in the development plan are maintained by adoption of a Development Agreement.

## 7.3 Alternatives Considered & Eliminated from Further Consideration

State CEQA Guidelines Section 15126.6(c) requires an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scope process, and to briefly explain the reasons underlying the agency's determination. Additionally, alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, or do not avoid any significant environmental effects. This section identifies the alternative considered but rejected as infeasible. This section also provides a brief explanation of the reasons for exclusion.

CEQA Guidelines requires examination of an alternative location for the project if such locations would result in the avoidance of or lessening of significant impacts. As noted above, the project objectives specifically relate to the existing Porcupine Creek Estate property, which is currently developed with a golf course, recreational facilities, and 23 keys. The proposed project objective of

repurposing the Porcupine Creek property as an exclusive, world-class retreat would not be addressed if an Alternative location is proposed.

The benefit of developing the proposed retreat at the existing, developed Porcupine Creek Estate property allows for achieving the project's objectives with less development activity and related environmental impacts, since the site is already equipped with a constructed golf course and associated amenities. Moreover, the unique location of the property, which includes open space areas to the north, west, and south, provides an ideal location for the proposed exclusive, retreat use. In addition to the foregoing, the Porcupine Creek property owner does not own or control any other suitable properties in the area, therefore, the relocation of the proposed project is not feasible.

## 7.4 Alternatives Evaluated in Detail

The following alternatives were selected for evaluation in this Draft EIR:

1. Alternative 1 – No Project/2020 Buildout of site
2. Alternative 2 – Standard Resort with 50 Keys
3. Alternative 3 – Retreat with 2020 Buildout Only (Reduced Project)
4. Alternative 4 – 1986 Magnesia Falls Cove Development (included for informational purposes)

### Evaluation of Alternatives

A comparison of the impacts of the project and the alternatives selected for further evaluation is provided in this section for each of the environmental topics addressed in the Draft EIR. This comparison of impacts assumes that the Mitigation Measures identified for each topic in this Draft EIR would also be incorporated into the alternatives.

Pursuant to the CEQA Guidelines, the discussion of the environmental effects of the alternatives in an EIR may be less detailed than provided for in the project but should be sufficiently detailed to allow meaningful evaluation, analysis, and comparison with the project.

### 7.4.1 Alternative 1 – No Project/2020 Buildout

Under the No Project/2020 Buildout Alternative ("Alternative 1"), the project would remain in its current and existing developed condition, with the completion of previously entitled building structures. The previously entitled 2020 buildout facilities include the development of 2 villas (one 4-bedroom and one 2-bedroom), a substation, and fitness pavilion. The No Project/2020 Buildout would continue to operate as the Porcupine Creek private estate property, with the addition of the 2020 buildout facilities and improvements. The existing visual character and visual resources would remain the same.

Construction of previously entitled elements would occur, however, impacts would not be significant. Further, impacts related to air quality, biological resources, cultural resources, geology and soils,

greenhouse gas emissions, noise, public services, transportation and tribal cultural resources would be incrementally reduced, compared to the proposed Porcupine Creek Retreat Specific Plan project (referred to as "proposed project" herein), but neither Alternative 1 nor the proposed project have any significant and unavoidable impacts. A comparative analysis of impacts for Alternative 1 is provided below:

### *Aesthetics*

Under the No Project/2020 Buildout Alternative, the visual character of the project, which is currently characterized as developed and gated for private access, would remain the same as the existing 2020 buildout. The views of the Santa Rosa Mountains, which are currently partially obstructed in the surrounding area by man-made structures, landscaping, residential homes, public facilities, barrier walls, and hedges, would continue to be partially obstructed by these existing features since Alternative 1 would not remove or add obstructive features. Additionally, onsite improvements would not consist of building heights that would exceed City standards or develop structures in areas immediately adjacent to the existing east-lying residential properties, hindering views of the scenic vista. Therefore, Alternative 1 would not substantially impact the existing visual character or scenic vista.

As determined in the Draft EIR, the proposed Porcupine Creek Retreat Specific Plan project also would not result in significant impacts to aesthetic resources and mitigation would not be required. Onsite improvements and structures proposed in both Alternative 1 and the proposed project would adhere to City standards and regulations regarding building heights and setbacks, which operate to protect the scenic vistas. Additional lighting fixtures utilized for Alternative 1 and the proposed project would remain consistent with the existing low-intensity light fixtures onsite, which illuminate building entrances and directional signage. Impacts to the scenic vistas or visual characters of the site will be less than significant, and neither Alternative 1 nor the proposed project would result in significant impacts.

### *Air Quality*

Under Alternative 1, construction of the previously entitled buildings would occur, adding approximately 15,000 square feet of building footprints to the project area. The addition and operation of these facilities would result in proportionally lower and less than significant construction-related and operational emissions compared to the proposed project. Compared to the existing condition, the short-term and long-term emissions from implementation of Alternative 1 would be incremental and not expected to exceed the established SCAQMD thresholds.

Construction of the proposed Porcupine Creek Retreat Specific Plan project would not be complete within the next 12 months, and thus would produce construction-related air quality impacts for a longer duration, compared to Alternative 1. Mitigation during construction, indicated above, would be applicable to the development of the proposed project, and would reduce potential impacts to

less than significant. Additionally, implementation of the proposed project would introduce increased use of the site, adding 27 "keys", as well as upgrades to the main house, a new restaurant, dining deck, upgraded spa complex, additional retreat related facilities, and a rerouted 18-hole golf course. These additions could expand the total building area on the estate from approximately 82,000 square feet (2020 Buildout) to approximately 250,000 square feet. Operation of the proposed project would incrementally increase air emissions; however, operational impacts regarding air quality are anticipated to be less than significant.

This Alternative would result in incrementally less air emissions compared to the proposed project, as it would avoid the addition of emissions from construction beyond the 2020 buildout, and operational impacts of increased intensity and land use at the Porcupine Creek site. However, neither Alternative 1 nor the proposed project have any significant and unavoidable air quality impacts.

### *Biological Resources*

Under Alternative 1, conditions to biological resources would remain the same. The project site is currently developed as a private estate with golf course and recreational amenities. The site is located adjacent to the Santa Rosa Mountains, which is a part of the San Jacinto Mountain and Santa Rosa Mountain Conservation Area determined by the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The areas of the property that lie adjacent to the Santa Rosa Mountains are currently surrounded by fencing to deter entry of big horn sheep onto the Porcupine Creek property. The Porcupine Creek property, as determined by the project-specific Biological Report, provides some suitable habitat for foraging and nesting wildlife species, as well as larger predators, including bobcats. However, the surrounding fencing and developed character of the site deters some wildlife.

The Porcupine Creek site is currently developed and construction of the 2020 buildout would develop an additional 15,000 square feet of building square footage, located centrally on the property. Therefore, Alternative 1 would not significantly impact biological resources.

Conversely, development of the proposed project may impact biological resources, therefore, mitigation is recommended. The proposed project's adjacency to the CVMSHCP Conservation Area would require the project to comply with the CVMSHCP Conservation Area Land Use Adjacency Guidelines. These guidelines address project impacts of drainage, toxics, lighting, noise, invasives, barriers, and grading/land development. Development of the proposed Porcupine Creek Retreat Specific Plan project would be required to adhere to these measures to reduce impacts to biological resources in the CVMSHCP Conservation Area to less than significant. Alternative 1 would avoid impacts associated with potential disturbance to biological resources, therefore, having less of an impact compared to the proposed project. However, neither Alternative 1 nor the proposed project have any significant and unavoidable biological impacts.

### *Cultural Resources*

Under Alternative 1, the project would primarily remain in its current condition, which includes a developed site. In addition to the existing buildings and uses, two villas, a substation, and a fitness pavilion would be developed as a part of 2020 buildout in this Alternative. Construction of the previously entitled buildings would involve grading which could disturb any subsurface cultural resources (historic or prehistoric) that may be present at the project site. However, due to the developed condition of the site, the finding of cultural resources in these areas are not likely in Alternative 1.

Per the conclusions in the Draft EIR, the development of the proposed project may result in impacts to cultural resources. However, these impacts can be mitigated to less than significant by retaining a qualified archaeologist in the event that unanticipated discoveries or suspected prehistoric or historical-period archaeological resources are encountered during construction, and a Native American Monitor for excavations deeper than 5-10 feet below the ground surface in previously disturbed golf course areas. Although the proposed project would implement mitigation to reduce impacts to less than significant, Alternative 1 would avoid impacts associated with potential disturbance to cultural resources, and would therefore have less of an impact compared to the proposed project.

### *Energy*

Electricity and natural gas resources are currently provided to the Porcupine Creek Estate by Southern California Edison (SCE)/Rancho Mirage Energy Authority (RMEA), and the Southern California Gas Company (SoCalGas or The Gas Company), respectively. Under Alternative 1, short-term energy consumption related to construction activities would occur until the end of 2020. Construction-related energy use would include the consumption of electricity for tools and power required for constriction trailers. Petroleum fuels, such as gasoline and diesel, would also be required during construction for the operation of machines, large equipment, and employee vehicle trips. Natural gas would not be required during construction activities. The use of electricity and petroleum during 2020 buildout would not be excessive, or unnecessary, and would cease at the conclusion of construction.

Under Alternative 1, the project would continue to operate as a private estate with the addition of two villas, a substation, and a fitness pavilion. The No Project/2020 Buildout Alternative would continue to consume energy. However, the energy demanded by the two villas, and fitness pavilion would not consume a substantial amount in addition to the existing uses. 2020 buildout conditions would also include the development of a substation located near the maintenance area. The proposed substation will provide and store energy for the project site. Operation of the project under Alternative 1 will continue to consume energy and will generate and store energy at 2020 buildout. Impacts to energy resources for Alternative 1 would be less than significant.

The consumption of energy resources during construction of the proposed project would be similar to the uses explained for Alternative 1; however, construction for the proposed project would take longer to complete than the 2020 buildout. Additionally, operation of the proposed project would include the development of 27 additional "keys", a modified main house, a new restaurant, dining deck, upgraded spa complex, and additional retreat related facilities. The operation of these proposed uses would consume more energy than the No Project/2020 Buildout Alternative, however, it was concluded that the proposed project would not result in significant impacts regarding energy resources, and mitigation is not required. Although the proposed project would use incrementally more energy than Alternative 1, neither would have a significant impact.

### *Geology and Soils*

The project site is currently developed and operates as the Porcupine Creek private estate. The site would remain generally the same under Alternative 1, with the exception of 2020 buildout facilities. As stated previously, 2020 buildout includes the development of two villas, a substation, and a fitness pavilion, which were previously entitled. The site is not located near an Alquist-Priolo Earthquake fault zone. Proposed 2020 structures would be developed to the most current state and local standards regarding impacts from seismic events. The proposed structures would not be located adjacent to the slopes of the Santa Rosa Mountains, and are not anticipated to be impacted by rockfalls or landslides. The site is currently served by sewer and no septic systems are proposed. The potential for impacts related to loss of topsoil, sedimentation, erosion, and landform alterations associated with the construction of the 2020 buildout of the site is anticipated to be less than significant.

The proposed Porcupine Creek Retreat Specific Plan project would result in the operation of a retreat with up to 50 "keys" and associated retreat facilities. Similar to Alternative 1's 2020 buildout facilities, the proposed retreat structures would also be developed to the most current state and local standards regarding building construction. The development of the proposed project may require updated geotechnical soils reports to address soils at the site. These updated soil reports would be required prior to the development of the proposed habitable structures. These mitigation measures are to be implemented in order to reduce the proposed project's impacts to less than significant.

With the foregoing, Alternative 1 would result in less impacts to geology and soils compared to the proposed Porcupine Creek Retreat Specific Plan project, but neither would result in a significant and unavoidable impact.

### *Greenhouse Gas Emissions*

The development and operation of the No Project/2020 Buildout Alternative would lead to an incremental increase in greenhouse gas emissions compared to existing conditions. Similar to Air Quality, construction of the 2020 buildout would result in short-term emissions due to construction activities and vehicle trips. The additional building footprints associated with 2020 buildout would

result in a short-term increase of emissions during construction, as well as a marginal increase of emissions for operation of the additional facilities. Operation of the two villas and fitness pavilion would increase greenhouse gas emissions nominally. The proposed project would result in greater greenhouse gas emissions, compared to Alternative 1 due to its increased intensity of the site, however, these impacts are considered to be less than significant.

### *Hazards and Hazardous Materials*

Under Alternative 1, the property would continue to operate as a private estate with golf course and recreational amenities. The use of hazardous materials would not occur in large quantities during the construction of the 2020 buildout structures or in the operation of the property, post-2020 buildout. Hazardous materials would be handled and stored in compliance to manufacturer guidelines to ensure the safe use of the product. Additionally, the contractor will identify a controlled staging area within the project limits for storing materials and equipment, as required by a Strom Water Pollution Prevention Plan (SWPPP), if applicable. Alternative 1 would not introduce any potentially new hazardous materials related to construction activities or operation. The handling of potentially hazardous materials on-site would continue to occur. There would be no uses onsite that would potentially create a hazardous risk to the public or environment or any activities that would inhibit any established hazard evacuation plan. The proposed project and Alternative 1 would continue to implement safety procedures when using, handling, storing hazardous materials. However, development of the proposed project may result in an increase of hazardous materials stored and used at the property for maintenance purposes. Therefore, as mitigation, the proposed project may be required to develop a Hazardous Materials Business Plan (HMBP) if the project uses or stores hazardous materials beyond a capacity threshold established by the County of Riverside. Therefore, impacts to hazards and hazardous materials would be reduced in Alternative 1, as compared to the proposed project, but neither would cause a significant and unavoidable impact.

### *Hydrology and Water Quality*

Under Alternative 1, the project would maintain its developed condition and accommodate the 2020 buildout facilities. The existing stormwater management infrastructure constructed on- and off-site to handle the corresponding drainage conditions would remain unchanged.

The proposed project facilities and supporting improvements will occur completely within the developed Porcupine Creek grounds, which benefits from a system of surface retention basins with a capacity to intercept, retain, and infiltrate approximately 1,230,299 cubic feet of stormwater volume. Such capacity has been found in the As-Built Hydrology Report to properly handle the design volume of 599,986 cubic feet determined by the controlling storm event for the site's condition. Based on this comparison, the existing retention facilities have a surplus capacity of approximately 630,313 cubic feet after addressing the on-site requirements noted above. The proposed project's engineered topographic features and landforms incorporated as depressed areas for retention in the existing golf

course design have allocated ample room to accommodate such storage capacities. Therefore, impacts of Alternative 1 and the proposed project on hydrology would be less than significant.

### *Land Use and Planning*

Under Alternative 1, the project would primarily remain in its current condition, which includes a developed site in addition to 2020 buildout, which has been previously entitled. There would be no changes in existing land use conditions, or conflicts with any land use plan, policy, or regulation. This Alternative, like the proposed project, would not divide an established community and no impacts would occur.

The proposed project includes various entitlements, such as a Specific Plan, a Development Agreement, a General Plan Zoning Map Amendment, a Development Permit Plan, Preliminary Development Plan, and a Lot Line Adjustment; however, none of these entitlements would result in any conflicts with any land use plan, policy or regulation. Therefore, neither Alternative 1 nor the proposed project would have a significant impact on land use.

### *Noise*

The No Project/2020 Buildout Alternative includes the existing Porcupine Creek Estate site and the construction and operation of two additional villas, a substation, and a fitness pavilion. Construction of these buildings would increase the ambient noise level for brief periods throughout the day. However, construction activities are permitted to occur during the hours of 7:00 a.m. to 7:00 p.m. and would not occur outside of these hours. Additionally, construction noise would contribute a short-term impact, and would cease once construction has ended.

Operational noise from the project is not anticipated to be significant since the operational activities would remain consistent with those currently existing at the Porcupine Creek property. Currently, operational noise includes landscaping, onsite maintenance, golf cart pass-by, and guests using the golf course or other course operations.

On- and off-site traffic noise would not impact the property and surrounding areas in Alternative 1. Although the development of the two additional villas may slightly increase the capacity for visitors, impacts would be nominal and insignificant.

As determined in this Draft EIR, the proposed project would include increased levels of noise during project construction and operation. However, this increase was determined be less than significant with the implementation of mitigation measures during project construction activities. Compared to the proposed project, the No Project/2020 Buildout Alternative would produce incrementally less noise impacts, however, both would result in impacts that are less than significant.

### *Public Services*

Under Alternative 1, the project site would not introduce residents, or uses that would place additional burden on the City of Rancho Mirage's public services. There would not be an increased demand in police, fire and emergency services. The existing public services at the project would remain as is, therefore, no significant impacts are anticipated.

As determined throughout the Draft EIR, the proposed project may increase service calls for police and fire services, however, impacts were concluded to be less than significant with compliance of applicable laws and codes imposed by the City and Riverside County Fire Department, and the payment of applicable Development Impact Fees. These mitigation measures would ensure impacts to public services are reduced to less than significant impacts.

Alternative 1 would result in less impacts to public services compared to the proposed project, but neither would result in significant and unavoidable impacts.

### *Transportation*

The No Project/2020 Buildout Alternative would not result in a significant increase of transportation or traffic. Construction of the 2020 buildout, which includes two villas, a substation, and a fitness pavilion, would involve short-term impacts to vehicle trips in the project vicinity. However, these impacts would be generally limited to permitted construction activity hours of 7:00 a.m. to 7:00 p.m., per the Rancho Mirage Municipal Code. Additionally, construction traffic would cease to continue once construction of the 2020 buildout is complete. An increase in operational traffic would also be nominal with the No Project/2020 Buildout Alternative since this Alternative would not include an increased density or the need for a substantial amount of additional vehicle trips.

Compared to the proposed project, the No Project/2020 Buildout Alternative would not create a significant amount of project traffic during construction activities and operation. The implementation of the proposed project would include the development of 27 additional keys as well as onsite amenities. Similar to the No Project/2020 Buildout Alternative, construction of the proposed project is anticipated to occur during the hours of 7:00 a.m. and 7:00 p.m. and would stop after construction is complete. The long-term operational vehicle trips from the proposed project would be generated on roadways adjacent to the project property, however, impacts are considered less than significant. In comparison to the proposed project, Alternative 1 would result in less impacts related to vehicle traffic during construction and operational activities, however, the proposed project-related impacts are also anticipated to be less than significant.

### *Tribal Cultural Resources*

Under Alternative 1, the Porcupine Creek property would not impact tribal cultural resources, and tribal consultation would not be required. However, the proposed project may require the presence of a Native American Monitor during excavations deeper than 5 to 10 feet below the ground surface.

This mitigation would reduce impacts to tribal cultural resources to less than significant ,and neither Alternative 1 nor the proposed project would have significant and unavoidable impacts.

### *Utilities*

Under Alternative 1, the project would remain in its current condition, with the development of the 2020 buildout, which includes two villas, a substation, and a fitness pavilion. The No Project/2020 Buildout Alternative would not significantly impact utilities at the Porcupine Creek site regarding water service and supply, wastewater collection and treatment, and solid waste. Compared to the proposed project, the No Project/2020 Buildout Alternative would result in incrementally less impacts to utilities due to the reduced impact and land use intensity of Alternative 1, but neither would have a significant impact.

#### *Water*

Water supply would continue to be provided by the Coachella Valley Water District (CVWD). A minimal increase in water demand may be required during the construction and operation of the 2020 buildout uses; however, this increased water demand would be minimal, and less than the water demand needed for the proposed project.

#### *Wastewater*

Wastewater service is also currently provided to the Porcupine Creek property by CVWD. The operation of the 2020 buildout in the No Project/2020 Buildout Alternative would moderately increase the wastewater produced at the site during operation of Alternative 1. The impact would be less than significant, and less than that needed for the proposed project.

#### *Solid Waste*

Burrtec currently provides the Porcupine Creek Estate with solid waste services. The development of the 2020 buildout buildings would require solid waste services to remove waste produced by construction activities. However, construction waste produced by 2020 buildout would cease after its completion. The operation of Alternative 1 would have a minimal increase in solid waste, correlated with the use of the two villas and fitness pavilion, in addition to the operation of the existing Porcupine Creek property uses. The proposed project would generate more solid waste, but the impact for both scenarios would be considered less than significant.

### *Wildfire*

The No Project/2020 Buildout Alternative would not increase the property's likelihood of being affected by a wildfire. Although the site lies adjacent to the Santa Rosa Mountains, wildfire risk in this area is not considered significant by the City of Rancho Mirage because the Santa Rosa Mountains do not support dense vegetative growth. Additionally, Alternative 1 would continue to include the landscaped and maintained golf course surrounding the habitable buildings. This consistent use of

"defensible space" would protect the buildings from a wildfire spread, and would restrict its growth to the surrounding areas, if a wildfire were to occur. Additionally, the 2020 buildout structures would be constructed in compliance with the most recent (2016) standards in the California Fire Code. Under Alternative 1, impacts of wildfires at the project site would be less than significant.

The occurrence of a wildfire at the proposed project is not anticipated to occur since the likelihood of a wildfire is small in the City of Rancho Mirage. Similar to Alternative 1, the proposed project would continue to maintain the landscaped golf course as defensible space, and the proposed buildings would be developed to the most current standards of the California Fire Code. Impacts of wildfires at the Porcupine Creek property, under Alternative 1 and the proposed project, would be similar, and considered less than significant.

### Summary of Comparative Impacts

A summary comparison of impacts associated with the project alternatives is provided in **Table 7.1, *Comparison of Alternatives to Project***. As described above, the No Project/2020 Buildout Alternative would result in somewhat reduced impacts associated with construction and operational impacts related to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards, hydrology and water quality, noise, public services, transportation, tribal cultural resources, and utilities, compared to the proposed Porcupine Creek Retreat Specific Plan project, due to its reduced intensity, but neither would result in any significant and unavoidable impacts.

#### *Relationship to Project Objectives*

While potentially significant impacts would be avoided with the No Project Alternative, the following project objectives would not be achieved with Alternative 1:

- Provide a comprehensive land use plan that establishes development standards, land use regulation, and programs to guide the orderly transition/development of the property.
- Repurpose Porcupine Creek as an exclusive, world-class retreat.
- Rezone the property to permit a retreat capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage.
- Maintain flexibility to respond to market conditions and evolving design needs.
- Ensure the high standards outlined in the development plan are maintained by adoption of Development Agreement.

## 7.4.2 Alternative 2 – Standard Resort (with 50 Keys)

Under the Standard Resort (with 50 Keys) Alternative ("Alternative 2"), the project would develop a standard resort with 50 keys, as well as modified improvements to accommodate public use of resort amenities (e.g., expanded restaurant and retail space, additional parking, etc.). Alternative 2 would

require a General Plan Amendment and Zone Change to allow the property to operate as a standard resort. This Alternative proposes to utilize the existing development and construct the same number of keys as the proposed project and would be open to the public upon operation.

Implementation of Alternative 2 would include 50 resort keys, as well as typical resort uses, such as the development of a main lobby, dining areas, recreational areas, resort shopping frontages, and parking areas for guests. Construction activities of the standard resort would not result in significant impacts. However, operation of the standard resort may include impacts involving traffic, air quality, noise, and greenhouse gas emissions due to its accessibility to the public. This Alternative is anticipated to generate somewhat lower Transient Occupancy Tax (TOT) revenues to the City because the standard resort would have lower rates for nightly stays, closer to the rates at the Ritz Carlton and other luxury resorts in the region. Although this reduction may be partially offset by a slight increase in sales tax from increased use of the restaurant and other resort amenities by the public, this alternative is anticipated to generate reduced overall revenues to the City. A comparative analysis of impacts for Alternative 2 is provided below:

### *Aesthetics*

Under the Standard Resort Alternative, impacts to the surrounding scenic vistas and visual character would be similar to the proposed project. The resort proposed in Alternative 2 would be subject to City review regarding architecture and design to ensure an aesthetically pleasing an undisruptive facility. The resort property would be required to adhere to City standards involving building heights and setbacks in order to reduce its impact on the existing scenic vista, which primarily includes the Santa Rosa Mountains. Currently, views of the Santa Rosa Mountains are obstructed by man-made structures, landscaping, residential homes, public facilities, barrier walls, and hedges, and will likely continue to be obstructed by the existing features if Alternative 2 is chosen.

Per Chapter 17.10.020 of the Rancho Mirage Municipal Code (RMMC), front, side, street side, and read setbacks are permitted to be 50 feet. The project proposes building setbacks of 250 feet, along the property's eastern boundary in order to create a buffer between the project buildings and the existing residential communities east of the project (Rancho Mirage Cove Neighborhood). The increased setbacks proposed for the project would ensure the proposed buildings do not obstruct the scenic vistas viewed by the existing residential properties.

Public resort entries would be proposed for Alternative 2 for guests and visitors of the resort. The public entry may include additional signage and lighting. As a typical feature of resorts, signage at the project site would be a likely component of the Standard Resort to notify the public and guests of its location. Signage proposed for Alternative 2 would be reviewed by the City of Rancho Mirage for approval. Additional lighting at the site would also be implemented during Alternative 2. This lighting would include light posts, illuminated parking areas for guest, recreational area lighting, lighting at

building entrances, signs, and directional lighting. Lighting required for Alternative 2 would also be reviewed by the City of Rancho Mirage for approval.

The Porcupine Creek Retreat Specific Plan proposes additional buildings consistent with the architecture of the existing Porcupine Creek structures. Additionally, project lighting would include lighting fixtures at building entrances, and illuminating directional signage, similar to that currently onsite.

The Standard Resort Alternative has the potential to create impacts to aesthetic resources such as scenic vistas, visual character, or lighting compared to the proposed project. Alternative 2's impacts to aesthetic resources may include increased lighting and signage, a public entry point for guests staying at the Standard Resort, and building heights and setbacks consistent with the City's standards for Resort Hotels. Meanwhile, the proposed Porcupine Creek Retreat Specific Plan project is not anticipated to significantly impact aesthetic resources.

### *Air Quality*

Under Alternative 2, construction of the Standard Resort would occur, adding additional building footprints to the project area. The addition of these buildings would require construction-related vehicle trips and short-term emissions related to construction activities.

The guests checking into the Porcupine Creek Retreat project are suggested to stay at the property for an extended period of time (up to a week), compared to a standard public resort, which allows guests to stay for shorter periods of time (i.e. a night or a weekend). Operation of the Standard Resort Alternative would increase emissions from guests who would check in and out more frequently than the proposed project. Since the site would be open to the public, vehicle traffic to the resort would be increased, thus the air quality would be impacted.

The proposed project would result in impacts less significant compared to the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan project would include guests who arrive at the site and are separated from their car. The proposed project would not be open to the public and guests would remain onsite a majority of their stay, thus reducing vehicle trips associated with guest arrivals, departures, and day trips, compared to Alternative 2. Air quality impacts from the proposed project would be less significant than the Standard Resort Alternative.

### *Biological Resources*

The Standard Resort (with 50 keys) Alternative would include the development of a resort facility, with 50 keys, and associated resort amenities. The site is located adjacent to the Santa Rosa Mountains, which is a part of the San Jacinto Mountain and Santa Rosa Mountain Conservation Area determined by the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The areas of the property that lie adjacent to the Santa Rosa Mountains, are currently surrounded by fencing to deter entry of big horn sheep onto the property. The Porcupine Creek Estate, as determined by the

project-specific Biological Report, provides some suitable habitat for foraging and nesting wildlife species, as well as larger predators, including bobcats. However, the surrounding fencing and developed character of the site deters some wildlife.

Since the Porcupine Creek property is located adjacent to the CVMSHCP Conservation Area, development of Alternative 2 would be required to comply with the CVMSHCP Conservation Area Land Use Adjacency Guidelines. These guidelines address impacts of drainage, toxics, lighting, noise, invasives, barriers, and grading/land development. Development of the Standard Resort would be required to adhere to these measures to reduce potential impacts to biological resources in the CVMSHCP Conservation Area. The proposed Porcupine Creek Retreat Specific Plan project is also required to adhere to this mitigation measure.

Both the proposed project and Alternative 2 would avoid impacts associated with potential disturbance to biological resources with the implementation of mitigation measures.

### *Cultural Resources*

Under Alternative 2, the development of the Standard Resort with 50 keys would involve grading, which could disturb subsurface cultural resources (historic or prehistoric) that may be present at the project site. Similar to the proposed Porcupine Creek Retreat Specific Plan project, Alternative 2 would require the applicant to retain a qualified archaeologist to identify suspected prehistoric or historical-period archaeological resources if encountered during construction. Additionally, a Native American Monitor may be required to be onsite if excavations are deeper that 5-10 feet below the ground surface in previously disturbed golf course areas. The implementation of these mitigation measures for Alternative 2 and the proposed project would reduce impacts to cultural resources to less than significant.

Both the proposed project and Alternative 2 would avoid impacts associated with potential disturbance to cultural resources with the implementation of mitigation measures.

### *Energy*

Under Standard Resort Alternative, energy consumption during project construction and operation would be increased, compared to the existing conditions. Short-term energy consumption related to construction activities would occur until the end of construction, and the Standard Resort would consume energy during operation.

Energy demand for the Standard Resort would be similar to that of the proposed Porcupine Creek Retreat Specific Plan project since both facilities would include 50 keys and associated amenities. As stated in the Draft EIR, consumption of energy resources is anticipated to be less than significant, and mitigation is not required.

### *Geology and Soils*

The Porcupine Creek site is currently developed and operates as a private estate. The site is currently served by sewer and septic systems are not proposed. The site is not located within or near an Alquist-Priolo Earthquake Fault Zone. Under the Standard Resort Alternative, the property would include 50 keys, and associated amenities. The proposed resort structures would be developed to the most current state and local standards regarding impacts from seismic events. Additionally, the design and construction of the habitable resort structures would adhere to the latest Uniform Building Code and California Building Code as required by the City Engineer. Geotechnical soils reports would also be required prior to the development of habitable structures to address soils at the project site. The implementation of these mitigation measures for the Standard Resort Alternative would reduce impacts related to onsite geology and soils to less than significant.

Alternative 2 and the proposed Porcupine Creek Retreat Specific Plan project would produce similar impacts to geology and soils at the Porcupine Creek property. Therefore, the previously mentioned mitigation measures are also required for the proposed project in order to reduce impacts to onsite geology and soils to less than significant.

### *Greenhouse Gas Emissions*

The development and operation of the Standard Resort (with 50 keys) Alternative would lead to increased emissions of greenhouse gases compared to existing conditions. As stated previously in Air Quality, construction of the Standard Resort would occur, developing additional building footprints to the project area. The addition of these buildings would require construction-related vehicle trips and cause short-term emissions related to construction activities.

Operation of the Standard Resort Alternative would increase greenhouse gas emissions as a result of the Resort guests that would check in and out more frequently than the proposed project; as well as guests who drive to the property to use the public amenities at the Resort. Since the site would be open to the public, vehicle traffic to the Standard Resort would be increased, thus increasing greenhouse gas emissions.

The proposed Porcupine Creek Retreat Specific Plan project would result in impacts less significant than the Standard Resort Alternative since the proposed project would include guests who arrive at the site and are separated from their car. The proposed project would not be open to the public and guests would remain onsite a majority of their stay, thus reducing vehicle trips associated with guests, compared to Alternative 2. Greenhouse gas emissions from the proposed project would be less significant than the Standard Resort Alternative.

### *Hazards and Hazardous Materials*

Under Alternative 2, the property would operate as a Standard Resort with 50 keys and resort amenities. The construction of the Standard Resort and the proposed Porcupine Creek Retreat

Specific Plan project would involve the use of potentially hazardous materials required for construction activities. This includes the use of petroleum products, fuels, maintenance materials, and other potentially flammable substances. However, the nature and quantities of these products would be limited to what is necessary to carry out construction of the site. Some of the materials would be transported to the site periodically by vehicle and would be stored in designated controlled areas on a short-term basis. When handled properly by trained individuals and consistent with the manufacturer's instructions and industry standards, the risk involved with handling these materials is considerably reduced. The contractor will identify a controlled staging area within the project limits for storing materials and equipment, as required by a Storm Water Pollution Prevention Plan (SWPPP) if applicable. The contractor would also implement best management practices (BMPs) to assure that impacts are minimized and that any minor spills are immediately and properly remediated.

Operation of the Standard Resort or Porcupine Creek Retreat Specific Plan project would include 50 keys, associated amenities, as well as the golf course. The nature of these uses are not expected to involve, as a primary activity, the routine transport, use, or disposal of hazardous materials in quantities or a manner that would pose a threat to the project and its surroundings, or create a significant hazard through a foreseeable accident conditions involving the release of hazardous materials into the environment.

Onsite storage and maintenance areas may include hazardous materials associated with landscape maintenance (fertilizers, pesticides, herbicides), as well as the maintenance of golf carts and other equipment used onsite. The applicant may be required to submit a Hazardous Materials Business Plan (HMBP) to the Riverside County Fire Department that identifies the hazardous materials to be used and stored on site, the location of the storage area, an emergency contingency plan showing how spills would be cleaned up, and any other information required in a HMBP. This mitigation measure applies to the Standard Resort Alternative and the Porcupine Creek Retreat Specific Plan project and would ensure that impacts from the release of hazardous materials at the site would be less than significant under either scenario.

### *Hydrology and Water Quality*

Under Alternative 2, the construction and operation of a Standard Resort would occur at the Porcupine Creek property. Currently, onsite retention basin capacity was determined to be sufficient to handle the on-site runoff conditions, as well as adequately intercept and retain runoff for the existing conditions, while maintaining additional stormwater retention and management capacity. Since Alternative 2 would propose the operation of 50 keys and associated amenities, it is assumed, for the purpose of this hydrology analysis, that hydrologic design of the Standard Resort would be similar to the proposed project, which proposes similar land use intensities. Onsite hydrology design for the proposed project is discussed subsequently.

The proposed project facilities and supporting improvements under this alternative will occur completely within the developed Porcupine Creek grounds, which benefits from a system of surface retention basins with a capacity to intercept, retain, and infiltrate approximately 1,230,299 cubic feet of stormwater volume. Such capacity has been found in the As-Built Hydrology Report to properly handle the design volume of 599,986 cubic feet determined by the controlling storm event for the site's condition. Based on this comparison, the existing retention facilities have a surplus capacity of approximately 630,313 cubic feet after addressing the on-site requirements noted above. The proposed project's engineered topographic features and landforms incorporated as depressed areas for retention in the existing golf course design have allocated ample room to accommodate such storage capacities. Therefore, impacts of the proposed project and Alternative 2 on hydrology would be less than significant.

### *Land Use and Planning*

The Porcupine Creek Estate property is currently located in the City of Rancho Mirage's Low-Density Residential, Open Space Private, Floodways and Drainage, and Mountain Reserve land use and zoning designations. The Standard Resort Alternative is not compliant with the City of Rancho Mirage's current General Plan land use and zoning designations established for the site. Therefore, under Alternative 2, the implementation of the Standard Resort would require entitlements similar to the Porcupine Creek Retreat Specific Plan project. As stated throughout, entitlements for the proposed project include a Specific Plan, a Development Agreement, a General Plan Zoning Map Amendment, a Preliminary Development Plan, and a Lot Line Adjustment. Alternative 2 would include similar entitlements to allow the proposed resort uses. Specifically, a General Plan Amendment and Zone Change would be required by Alternative 2. Additional entitlements, such as a Specific Plan, a Development Agreement, a Preliminary Development Plan, and a Lot Line Agreement may be required for Alternative 2, depending on the requirements of the City of Rancho Mirage.

The Standard Resort Alternative would have impacts similar to the proposed project regarding land use within the City. However, these impacts are not considered significant and mitigation would not be required for the proposed Porcupine Creek Retreat Specific Plan project or Alternative 2.

### *Noise*

Both Alternative 2 and the proposed project would include noise impacts from construction activities. Construction noise generally includes the movement of large equipment and vehicles, and the use of heavy equipment, such as air compressors, backhoes, generators, graders, pavers, rollers, and scrapers. Construction under Alternative 2 may differ from the proposed project since the Standard Resort Alternative would include the development of resort related facilities, such as parking areas, or lots, a lobby, and resort-related amenities. The location of these facilities may also be different than the proposed project's facilities.

A project-specific Noise Impact Study was conducted for the proposed Porcupine Creek Retreat Specific Plan project. Per the Noise Impact Study, construction noise is not anticipated to result in significant impacts during the development of the proposed project. Although the noise study determined that impacts would be less than significant, the study required that noise-reducing measures be implemented at the site during construction. These measures included: only permitting construction activities during 7:00 a.m. and 7:00 p.m., per the City's Municipal Code; requiring construction staging areas and stationary noise sources be located at least 600 feet from adjacent residential properties to the maximum extent feasible; turning off idling equipment when not in use; ensuring that construction equipment be equipped with noise attenuating devices; and ensuring that construction equipment is maintained and secured from rattling and banging. These measures would be implemented during construction and cease at the completion of project construction.

Operational noise impacts from Alternative 2 would include stationary noise, as well as on-site and off-site traffic noise generated from the site. Operation of the Standard Resort Alternative would increase on- and off-site vehicle trips from guests who would check in and out more frequently than the proposed project, as well as guests who drive to use the amenities at the site. Since the site would be open to the public, vehicle traffic to the resort would be increased, thus increasing traffic-related noise.

The proposed project would result in operational impacts less significant than the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan project would include guests who arrive at the site and are separated from their car. The proposed project would not be open to the public and guests would remain onsite a majority of their stay, thus reducing vehicle trips and noise resulting from traffic associated with guests, compared to Alternative 2. Noise impacts from the proposed project would be less significant than the Standard Resort Alternative.

### *Public Services*

Under Alternative 2, the Standard Resort may require an increased demand in police and fire services due to the increased intensity of the site. The resort use with 50-keys would increase activity on the property, which could result in increased calls for emergency services. However, the Standard Resort Alternative and the proposed project are not anticipated to substantially increase the need for new or expanded police and fire facilities and response times are not expected to be impacted. Additionally, all new construction in the City will be required to pay Development Impact Fees to assist in offsetting impacts to police and fire services.

As stated in the Public Services section of the Draft EIR, the proposed project may increase the service calls for emergency calls provided by police and fire, however, impacts were concluded to be less than significant with compliance of applicable laws and codes imposed by the City and Riverside County Fire Department, and the payment of Development Impact Fees. Similarly, Alternative 2

would implement the previously mentioned mitigation measures to ensure that impacts to public services are reduced to less than significant.

### *Transportation*

The Standard Resort (with 50 keys) Alternative would result in an increase of transportation or traffic in the project area. Short-term construction vehicle trip impacts would be a result from the development of the Standard Resort. However, these impacts would be generally limited to permitted construction activity hours of 7:00 a.m. to 7:00 p.m., per the Rancho Mirage Municipal Code. Additionally, construction traffic would cease to continue once construction of the Standard Resort facilities were complete.

Operational traffic as a result of the Standard Resort Alternative would also increase vehicle trips in the project area. This would be a direct result of the Resort, with 50 keys and resort-related amenities. The Resort would also be open to the public. Operation of the Standard Resort Alternative would increase on- and off-site vehicle trips from guests who would check in and out more frequently than the proposed project, as well as guests who drive to use the amenities at the site. Since the site would be open to the public, vehicle traffic to the resort would be increased.

The proposed project would result in impacts less significant than the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan project would include guests who arrive at the site and separated from their car. The proposed project would not be open to the public and guests would remain onsite a majority of their stay, thus reducing vehicle trips and traffic associated with guests, compared to Alternative 2.

### *Tribal Cultural Resources*

Under Alternative 2, the Standard Resort with 50 keys located at the Porcupine Creek property may impact subsurface tribal cultural resources. Tribal consultation would be required, and the project may require the presence of a Native American Monitor during excavations deeper than 5 to 10 feet below the ground surface. The implementation of this mitigation measure for Alternative 2 and the proposed project would reduce impacts to tribal cultural resources to less than significant.

### *Utilities*

The Standard Resort with 50 keys Alternative would increase utilities, such as water service and supply, wastewater collection and treatment, and solid waste due to the increased intensity on the property.

#### *Water*

Water supply would continue to be provided by the Coachella Valley Water District (CVWD). The project may generate a slight increase in water demand during construction and operation of the Standard Resort uses. Water demand and supply would be reviewed by CVWD to determine if

adequate service could be provided for the Standard Resort Alternative. It is likely that the Standard Resort Alternative would result in similar water demand as the proposed project given the same number of keys and additional water lines would also be required at the site in order to support the increased development proposed for the Standard Resort. The Standard Resort Alternative is anticipated to have greater use of restaurants and other resort amenities because such amenities are open to the general public in addition to guests staying at the resort, and as a result, would have a higher daily water usage than the proposed project.

The proposed project would result in impacts less significant than the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan is not open to the public given the projects exclusive use for retreat guests. Compared with Alternative 2, the proposed project would reduce the year-round impact of water usage compared to operating a Standard Resort that is open to the public. Water impacts from the proposed project would be less significant than the Standard Resort Alternative.

### *Wastewater*

Wastewater service is also currently provided to the Porcupine Creek property by CVWD. Similar to the water services, wastewater produced would be increased with the operation of the Standard Resort Alternative. CVWD would review the project and determine if adequate wastewater service could be provided to the site. However, like water, it is likely that the Standard Resort Alternative would result in similar waste water demands as the proposed project given the same number of keys and additional sewer lines also required to serve the site in order to support the increased development proposed for the Standard Resort. The Standard Resort Alternative is anticipated to have greater use of restaurants and other resort amenities because such amenities are open to the general public in addition to guests staying at the resort, and as a result, would generate more wastewater than the proposed project.

The proposed project would result in impacts less significant than the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan is not open to the public given the project's exclusive use for retreat guests. Compared with Alternative 2, this reduces the year-round wastewater impact of a Standard Resort that is open to the public. Wastewater impacts from the proposed project would be less significant than the Standard Resort Alternative.

### *Solid Waste*

Burrtec currently provides the Porcupine Creek Estate with solid waste services. The development of the Standard Resort facilities would require solid waste services to remove waste produced by construction activities. However, construction waste produced by Standard Resort would not be significant and would cease after the facilities were developed. The operation of Alternative 2 would increase solid waste, correlated with the increased intensity and Standard Resort uses. The increase

of solid waste produced by the Standard Resort would be higher than the amount of solid waste produced by the proposed Porcupine Creek Retreat Specific Plan project. The Standard Resort Alternative is anticipated to have greater use of restaurants and other resort amenities because such amenities are open to the general public in addition to guests staying at the resort, and as a result, would generate more solid waste than the proposed project.

The proposed project would result in impacts less significant than the Standard Resort Alternative since the Porcupine Creek Retreat Specific Plan is not open to the public and would only be used by retreat guests. Solid waste impacts from the proposed project would be less significant than the Standard Resort Alternative.

### *Wildfire*

The Standard Resort Alternative would not increase the property's likelihood of being affected by a wildfire. Although the site lies adjacent to the Santa Rosa Mountains, wildfire risk in this area is not considered significant by the City of Rancho Mirage because the Santa Rosa Mountains do not support dense vegetative growth. Additionally, Alternative 2 would continue to include the landscaped and maintained golf course surrounding the habitable buildings. This consistent use of "defensible space" would protect the buildings from a wildfire spread, and would restrict its growth to the surrounding areas, if a wildfire were to occur. Additionally, the Resort facilities and structures would be constructed in compliance with the most recent (2016) standards in the California Fire Code. Under Alternative 2, impacts of wildfires at the project site would be less than significant.

In comparison, the occurrence of wildfire at the proposed project is not anticipated to occur since the likelihood of a wildfire is small in the City of Rancho Mirage. Similar to Alternative 2, the proposed project would continue to maintain the landscaped golf course as defensible space, and the proposed buildings would be developed to the most current standards of the California Fire Code. Impacts of wildfires at the Porcupine Creek property, under Alternative 2 and the proposed project, would be less than significant.

## Summary of Comparative Impacts

A summary comparison of impacts associated with the project alternatives is provided in **Table 7.1*, Comparison of Alternatives to Project***. As described above, the Standard Resort Alternative would result in similar, mitigatable impacts to the proposed project related to biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, public services, tribal cultural resources, utilities, and wildfire.

The Standard Resort (with 50 keys) Alternative would result in greater impacts regarding aesthetics, air quality, greenhouse gas emissions, noise, and transportation, compared to the proposed Porcupine Creek Retreat Specific Plan project. Alternative 2 would not eliminate or substantially reduce any of the impacts of the proposed project.

### *Relationship to Project Objectives*

While potentially significant impacts would be avoided with the Standard Resort Alternative, the following project objections would not be achieved with Alternative 2:

- Repurpose Porcupine Creek as an exclusive, world-class retreat.
- Rezone the property to permit a retreat capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage. (TOT would be reduced if the Standard Resort Alternative were implemented because the average nightly rates would be substantially reduced).

## 7.4.3 Alternative 3 –Retreat with 2020 Buildout Only (Reduced Project)

Under the Retreat with 2020 Buildout Only Alternative ("Alternative 3"), the project proposes to operate as a retreat, with development of the previously entitled 2020 buildout facilities (a total of 25 keys). As stated in Alternative 1, the 2020 buildout includes the development of 2 villas (one 4-bedroom and one 2-bedroom), a substation, and a fitness pavilion. The project would require a General Plan Amendment and Zone Change in order to operate as a retreat; however, the existing environmental conditions and visual character would remain the same.

Construction of the two villas, substation, and fitness pavilion would occur; however, impacts would not be significant. Further, significant impacts related to air quality and greenhouse gas emissions would be reduced. Additionally, the Transient Occupancy Tax (TOT) would also be reduced, compared to the proposed project, in Alternative 3. A comparative analysis of impacts for Alternative 3 is provided below:

### *Aesthetics*

Under the Retreat with 2020 Buildout Only Alternative, the existing visual character of the project, which is developed and gated for private access, would remain the same. The views of the Santa Rosa Mountains, which are currently partially obstructed by man-made structures, landscaping, residential homes, public facilities, barrier walls, and hedges, will continue to be partially obstructed by the existing features if Alternative 3 is chosen. Impacts to the scenic vistas or visual character of the site will be less than significant, and neither Alternative 3 nor the proposed Porcupine Creek Retreat Specific Plan project would result in significant impacts.

### *Air Quality*

Under Alternative 3, construction of the previously entitled buildings would occur, adding approximately 15,000 square feet of building footprints to the project area. The addition of these buildings would result in construction-related vehicle trips and construction-related short-term emissions. Construction would finish when the 2020 buildout is completed. This Alternative would result in less air quality impacts compared to the proposed Porcupine Creek Retreat Specific Plan

project, as it would avoid the addition of emissions from construction beyond the year 2020. Additionally, this Alternative would introduce a decreased land use intensity compared to the operation of the built-out proposed project.

### *Biological Resources*

Under Alternative 3, conditions to biological resources would remain the same. The project site is currently developed as a private estate with golf course and recreational amenities. The site is located adjacent to the Santa Rosa Mountains, which is a part of the San Jacinto Mountain and Santa Rosa Mountain Conservation Area determined by the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The areas of the project that lie adjacent to the Santa Rosa Mountains, is currently surrounded by fencing to deter entry of big horn sheep onto the property.

The Porcupine Creek property, as determined by the project-specific Biological Report, provides some suitable habitat for foraging and nesting wildlife species, as well as larger predators, including bobcats. However, the surrounding fencing and developed character of the site deters some wildlife.

Since the project is currently developed, Alternative 3 would avoid impacts associated with potential disturbance to biological resources since it would not involve development extending beyond what is currently entitled (two villas, a substation, and a fitness pavilion). While impacts would be less than significant with the implementation of mitigation under the proposed Porcupine Creek Retreat Specific Plan project, impacts of Alternative 3 would be reduced compared to the proposed project.

### *Cultural Resources*

Under Alternative 3, the project would primarily remain in its current condition, which includes a developed site. In addition to the existing buildings and uses, two villas, a substation, and a fitness pavilion would be developed as a part of the 2020 buildout. Construction of the previously entitled buildings would involve grading which could disturb any subsurface cultural resources (historic or prehistoric) that may be present at the project site. However, due to the developed condition of the site, the finding of cultural resources in these areas are not likely in Alternative 3.

Per the findings in the Draft EIR, the development of the proposed project may result in impacts to cultural resources. However, these impacts can be mitigated to less than significant with the implementation of a Native American Monitor and retainment of a qualified archeologist should anything of potential cultural significance be discovered onsite. Therefore, Alternative 3 would result in less impacts than the proposed project, but neither would result in any significant and unavoidable impacts.

### *Energy*

Electricity and natural gas are currently provided to the Porcupine Creek Estate by Southern California Edison (SCE)/Rancho Mirage Energy Authority (RMEA), and Southern California Gas Company

(SoCalGas or The Gas Company), respectively. Under the Retreat with 2020 Buildout Alternative, SCE/RMEA and SoCalGas would continue to provide the site with energy.

2020 buildout, under this Alternative, would result in short-term energy consumption related to construction activities until the end of 2020. Construction-related energy consumption would not lead to wasteful, inefficient, or unnecessary consumption of energy resources, and would cease once construction of the two villas, substation, and fitness pavilion is complete.

The Retreat would operate similarly to the existing Porcupine Creek Estate, and energy consumption, such as electricity, natural gas, and petroleum use, would continue to occur onsite. Operation of the 2020 buildout structures would nominally increase for the function of these facilities. However, the energy demanded by the two villas and fitness pavilion would not consume a substantial amount in addition to the existing uses, and would not result in wasteful inefficient, or unnecessary consumption of energy resources. 2020 buildout conditions would include the development of a substation near the maintenance area in the northern portion of the project site. The proposed substation will provide and store energy for the project site.

Construction and operation of the project under Alternative 3 will continue to consume energy, with a nominal increase due to 2020 buildout facilities. However, this nominal increase in facilities would continue to result in less than significant impacts related to energy resources. The proposed Porcupine Creek Retreat Specific Plan project would consume more energy resources during construction and operation of the proposed project, compared to the Retreat with 2020 Buildout Only Alternative, but neither would result in significant and unavoidable impacts.

### *Geology and Soils*

The project site is currently developed and operates as a private estate. The site would remain generally the same under Alternative 3, with the exception of 2020 buildout. 2020 buildout includes the development of two villas, a substation, and a fitness pavilion, which were previously entitled. The site is not located within or near an Alquist-Priolo Earthquake fault zone. Proposed 2020 structures would be developed to the most current state and local standards regarding impacts from seismic events. The proposed structures would not be located adjacent to the slopes of the Santa Rosa Mountains, and are not anticipated to be impacted by rockfalls or landslides. The site is currently served by sewer and septic systems are not proposed. The potential for impacts related to loss of topsoil, sedimentation, erosion, and landform alterations associated with the construction of the 2020 buildout of the site is anticipated to be less than significant.

The proposed Porcupine Creek Retreat Specific Plan project would result in the operation of a retreat with up to 50 “keys” and associated retreat facilities. Similar to Alternative 3’s 2020 buildout facilities, the proposed retreat structures would also be developed to the most current state and local standards regarding building construction. The development of the proposed project may require updated geotechnical soils reports to address soils at the site. These updated soil reports would be

required prior to the development of the proposed habitable structures. These mitigation measures are to be implemented in order to reduce the proposed project's impacts to less than significant.

With the foregoing, Alternative 3 would result in less impacts to geology and soils compared to the proposed Porcupine Creek Retreat Specific Plan project.

### *Greenhouse Gas Emissions*

The development and operation of the Retreat with 2020 Buildout Only Alternative would lead to increased emissions of greenhouse gases compared to existing conditions. Similar to Air Quality, construction of the previously entitled villas, substation, and fitness pavilion would occur, adding additional building footprints to the project area. The addition of these buildings would result in construction-related vehicle trips and short-term emissions related to construction activities. However, these construction-related emissions would cease once construction of the 2020 buildout facilities were complete.

Operation of the Retreat with 2020 Buildout Only Alternative would nominally increase emissions from guests who would check in and out of the Retreat facility.

Operations of Alternative 3 would be similar to the proposed project. However, since Alternative 3 would not result in the development of a 50-key Retreat, Alternative 3 would result in incrementally less impact. Therefore, greenhouse gas emissions from the Retreat with 2020 Buildout Only would be less significant than the proposed Porcupine Creek Retreat Specific Plan project, although both scenarios would result in less than significant impacts.

### *Hazards and Hazardous Materials*

Under Alternative 3, the property would operate as a Retreat with 2020 buildout. 2020 buildout would include the construction and operation of two villas, a substation, and a fitness pavilion, which were previously entitled. The use of hazardous materials would not occur in large quantities during the construction of the 2020 buildout structures, and the operation of the property, post-2020 buildout. Hazardous materials would be handled and stored in compliance to manufacturer guidelines to ensure the safe use of the product. Additionally, the contractor will identify a controlled staging area within the project limits for storing materials and equipment, as required by a Strom Water Pollution Prevention Plan (SWPPP), if applicable.

Alternative 3 would not introduce any potentially new hazardous materials related to the project's construction or operational activities. The handling of potentially hazardous materials on-site would continue to occur, however, these hazardous materials are stored and handled to manufacturer standards. There would be no uses onsite that would potentially create a hazardous risk to the public or environment or any activities that would inhibit any established hazard evacuation plan. The proposed project and Alternative 3 would continue to implement safety procedures when using,

handling, storing hazardous materials. Impacts would not be reduced compared to those under the project.

Operation of the Porcupine Creek Retreat Specific Plan project would include 50 keys, associated amenities, as well as the golf course. The nature of these uses are not expected to involve, as a primary activity, the routine transport, use, or disposal of hazardous materials in quantities or a manner that would pose a threat to the project and its surroundings, or create a significant hazard through a foreseeable accident conditions involving the release of hazardous materials into the environment.

Onsite storage and maintenance areas may include hazardous materials associated with landscape maintenance (fertilizers, pesticides, herbicides), as well as the maintenance of golf carts and other equipment used onsite. The applicant may be required to submit a Hazardous Materials Business Plan (HMBP) to the Riverside County Fire Department that identifies the hazardous materials to be used and stored on site, the location of the storage area, an emergency contingency plan showing how spills would be cleaned up, and any other information required in a HMBP. Compliance with the applicable legal requirements for the handling of hazardous materials would ensure that impacts from the potential release of hazardous materials at the site would be less than significant.

Impacts of Alternative 3 would be less than the proposed project.

### *Hydrology and Water Quality*

Under Alternative 3, the project would primarily remain in its current condition, with the addition of the 2020 buildout. Currently, onsite retention basin capacity was determined to be sufficient to handle the on-site runoff conditions, as well as adequately intercept and retain runoff for the existing conditions, while maintaining additional stormwater retention and management capacity. Under Alternative 3, onsite hydrology would remain the same.

The proposed project facilities and supporting improvements will occur completely within the developed Porcupine Creek grounds, which benefits from a system of surface retention basins with a capacity to intercept, retain, and infiltrate approximately 1,230,299 cubic feet of stormwater volume. Such capacity has been found in the As-Built Hydrology Report to properly handle the design volume of 599,986 cubic feet determined by the controlling storm event for the site's condition. Based on this comparison, the existing retention facilities have a surplus capacity of approximately 630,313 cubic feet after addressing the on-site requirements noted above. The proposed project's engineered topographic features and landforms incorporated as depressed areas for retention in the existing golf course design have allocated ample room to accommodate such storage capacities. Therefore, impacts of the proposed project and Alternative 3 on hydrology would be less than significant.

### *Land Use and Planning*

The Porcupine Creek Estate property is currently located in the City of Rancho Mirage's Low-Density Residential, Open Space Private, Floodways and Drainage, and Mountain Reserve land use and zoning designations. Under Alternative 3, the property would operate as a Retreat with 2020 buildout facilities, which is not currently compliant with the City of Rancho Mirage's current General Plan land use and zoning designations for the site. This Alternative would require a General Plan Amendment and Zone Change in order to operate as a Retreat.

The proposed project includes various entitlements, such as a Specific Plan, a Development Agreement, a General Plan Zoning Map Amendment, a Development Permit Plan, Preliminary Development Plan, and a Lot Line Adjustment. As both Alternative 3 and the proposed project would require a General Plan Zoning Map Amendment, neither would have a significant impact on land use and planning.

This Alternative, like the proposed project, would not divide an established community and no impacts would occur.

### *Noise*

The Retreat with 2020 Buildout Only Alternative includes the existing operation of a Retreat facility and the construction and operation of two additional villas, a substation, and a fitness pavilion. Construction of these buildings would increase the ambient noise level for brief periods throughout the day. However, construction activities are permitted to occur during the hours of 7:00 a.m. to 7:00 p.m. Construction at the site will not occur outside of these hours, therefore, reducing noise level impacts to surrounding residential uses. Additionally, construction noise would contribute a short-term impact, and would cease once construction ends.

Operational noise from the project is not anticipated to be significant since the operational activities would remain consistent with those currently existing at the Porcupine Creek property. Currently, operational noise includes landscaping, onsite maintenance, golf cart pass-by, and patrons using the golf course or other course operations.

On- and off-site traffic noise would not impact the property and surrounding areas in Alternative 3. This Alternative may slightly increase the number of visitors, with the development of the two villas, however, impacts would be nominal and insignificant.

As determined in this Draft EIR, the proposed project would include increased levels of noise during project construction and operation. However, this increase was determined be less than significant with the implementation of mitigation measures during project construction activities. Compared to the proposed project, the Retreat with 2020 Buildout Only Alternative would produce less noise impacts, however, both would result in impacts that are less than significant.

### *Public Services*

Under Alternative 3, the project site would not introduce residents, or uses that would place additional burden on the City of Rancho Mirage's public services. There would not be an increased demand in police, fire, and emergency services. The existing public services at the project would remain as is, therefore, no significant impacts are anticipated. As determined throughout the Draft EIR, the proposed project may increase service calls for police or fire services, however, impacts were concluded to be less than significant with the implementation of mitigation. These mitigation measures included the compliance with applicable laws and standards for development as well as the payment of applicable Development Impact Fees. Alternative 3 would result in less impacts than the proposed Porcupine Creek Retreat Specific Plan project. However, the proposed project would reduce impacts to public services to less than significant.

### *Transportation*

The Retreat with 2020 Buildout Only Alternative would not result in an increase of transportation or traffic to significant levels. Short-term construction impacts would be included in the development of the 2020 buildout, which includes two villas and a fitness pavilion. Construction of the 2020 buildout would involve short-term impacts to vehicle trips in the project vicinity. However, these impacts would be generally limited to permitted construction activity hours of 7:00 a.m. to 7:00 p.m., per the Rancho Mirage Municipal Code. Additionally, construction traffic would cease to continue once construction of the 2020 buildout buildings were complete. Operational traffic would also be nominal with the Retreat with 2020 Buildout Only Alternative since this Alternative would not include an increased density and need for additional vehicle trips.

Compared to the proposed project, Alternative 3 would not create a significant amount of project traffic during construction activities and operation. The implementation of the proposed project would include the development of approximately 27 additional keys and additional onsite amenities. Similar to the Retreat with 2020 Buildout Only Alternative, construction of the proposed project is anticipated to occur during the hours of 7:00 a.m. and 7:00 p.m. and would stop after construction is complete. The long-term operational vehicle trips from the proposed project would be generated on roadways adjacent to the project property, however, impacts are considered less than significant. In comparison to the proposed project, however, Alternative 3 would result in incrementally reduced impacts related to vehicle traffic during construction and operational activities.

### *Tribal Cultural Resources*

Under Alternative 3, the Porcupine Creek property would not impact tribal cultural resources, and tribal consultation would not be required. However, the proposed Porcupine Creek Retreat Specific Plan project may require the presence of a tribal monitor during excavations deeper than 5 to 10 feet below the ground surface. This mitigation would reduce impacts to less than significant.

### *Utilities*

Under Alternative 3, the project would remain in its current condition, with the development of the 2020 buildout, which includes two villas and a fitness pavilion. The Retreat with 2020 Buildout Only Alternative would not significantly impact utilities at the Porcupine Creek site regarding water service and supply, wastewater collection and treatment, and solid waste.

#### *Water*

Water supply would continue to be provided by the Coachella Valley Water District (CVWD). Compared to the proposed project, Alternative 3 would not create a significant increase to the existing water demand. The implementation of the proposed project would have a larger increase in water demand. However, as determined in this Draft EIR, this increase was determined to be less than significant since adequate water supplies are available.

Compared to the proposed project, the Retreat with 2020 Buildout Only Alternative would have a smaller water demand, but both would result in impacts that are less than significant.

#### *Wastewater*

Wastewater service is also currently provided to the Porcupine Creek property by CVWD. The operation of the 2020 buildout in Alternative 3 would have a minimal increase to the existing wastewater demand. Similar to the water demand, the implementation of the proposed project would have a larger increase in wastewater demand. However, as determined in this Draft EIR, this increase was determined to be less than significant since adequate sewer capacity is available.

Compared to the proposed project, the Retreat with 2020 Buildout Only Alternative would have a smaller wastewater demand, but both would result in impacts that are less than significant.

#### *Solid Waste*

Burrtec currently provides the Porcupine Creek Estate with solid waste services. The development of the 2020 buildout buildings would require the removal of construction waste and debris produced by construction activities. However, construction waste produced by the 2020 buildout would cease after construction. The operation of Alternative 3 would have a very minimal increase to solid waste, associated with the use of the two villas and fitness pavilion, in addition to the operation of the existing property uses. Whereas, the proposed project would be required to use a commercial generation rate for solid waste as opposed to its current residential rate. The implementation of the proposed project would have a larger increase in solid waste demand. However, as determined in this Draft EIR, this increase was determined to be less than significant since there is sufficient landfill capacity remaining.

Compared to the proposed project, the Retreat with 2020 Buildout Only Alternative would generate less solid waste, but both would result in impacts that are less than significant.

### *Wildfire*

The Retreat with 2020 Buildout Only Alternative would not increase the property's likelihood of being affected by a wildfire. Although the site lies adjacent to the Santa Rosa Mountains, wildfire risk in this area is not considered significant by the City of Rancho Mirage because the Santa Rosa Mountains do not support dense vegetative growth. Additionally, Alternative 3 would continue to include the landscaped and maintained golf course surrounding the habitable buildings. This consistent use of "defensible space" would protect the buildings from a wildfire spread, and would restrict its growth to the surrounding areas, if a wildfire were to occur. Additionally, the 2020 buildout structures would be constructed in compliance with the most recent (2016) standards in the California Fire Code. Under Alternative 3, impacts of wildfires at the project site would be less than significant.

The occurrence of a wildfire at the proposed project is not anticipated to occur since the likelihood of a wildfire is small in the City of Rancho Mirage. Similar to Alternative 3, the proposed project would continue to maintain the landscaped golf course as defensible space, and the proposed buildings would be developed to the most current standards of the California Fire Code. Impacts of wildfires at the Porcupine Creek property, under Alternative 3 and the proposed project, would be less than significant.

## Summary of Comparative Impacts

A summary comparison of impacts associated with the project alternatives is provided in **Table 7.1*, Comparison of Alternatives to Project***. As described above, the Retreat with 2020 Buildout Only Alternative would result in similar or reduced impacts associated with construction and operational impacts related to aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards, hydrology and water quality, noise, public services, transportation, tribal cultural resources, and utilities, compared to the proposed Porcupine Creek Retreat Specific Plan project, due to its reduced intensity.

### *Relationship to Project Objectives*

While no significant and unavoidable impacts would be substantially lessened or avoided with the Retreat with 2020 Buildout Only Alternative, the impacts would be incrementally reduced in the areas listed above. However, the following project objections would not be achieved with Alternative 3:

- Rezone the property to permit a retreat capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage. Under Alternative 3, the project would still generate TOT revenue to the City, but at a substantially reduced level due to the smaller size of the retreat. In addition, it is unclear whether the reduced size retreat would be commercially viable without the ability to construct up to 50 keys.
- Maintain flexibility to respond to market conditions and evolving design needs.

### 7.4.4 Alternative 4 – 1986 Magnesia Falls Cove Development

The 1986 Magnesia Falls Cove Development ("Alternative 4") examines the impacts that would result from development of the Magnesia Falls Cove project, which was previously approved by the City of Rancho Mirage in 1986. When approved in 1986, this project included the proposed development of a 530-unit residential development on approximately 119 acres, out of a total contiguous holding of 305.5 acres located within and adjacent to the current Porcupine Creek property. The 1986 proposed development included 140 single family lots, 390 townhouse condominium units, a five-acre neighborhood park, and associated improvements. The single family lots would occur on a total of 60.3 gross acres, or an average density of 2.3 units per gross acre with common open space/recreation facilities. The single family lots were proposed south of the existing developed single-family residential lots, specifically, south of Halgar Road and Gardess Road. The development of the 390 townhouse condominium units would occur on approximately 58.7 acres of the site, or 6.6 units per gross acre. The condominium development was planned between the West and East Magnesia Channels. If this Alternative was limited to the current Porcupine Creek property, with the total number of units reduced proportionately, it would include 111 single family homes and 110 townhouse units.

This Alternative was previously studied in an Environmental Impact Report that analyzed the various impacts of the Magnesia Falls Cove Development. Per the Magnesia Falls Cove Development Environmental Impact Report, impacts to visual resources, biological resources, cultural resources, traffic, air quality, noise, and land use compatibility were identified and required mitigation. Unavoidable significant impacts were identified for the 1986 Magnesia Falls Cove Development regarding biological resources, air quality, and noise impacts. Project related impacts to traffic/circulation, biological resources, cultural resources, visual resources, noise, air quality, and land use compatibility (as presented in the Magnesia Falls Cove EIR) are discussed in greater detail subsequently.

This Alternative 4 is included for informational purposes only and is not proposed for development by the property owner or the City.

#### *Aesthetics*

The development of 140 single family homes and 390 multifamily (townhouse) homes was proposed under Alternative 4. Per the Magnesia Falls Cove 1986 EIR ("1986 EIR"), to avoid potential impacts to visual resources and lighting, strict development standards should be applied to the proposed development to maintain the lowest building profiles practical. The EIR required the following:

- The use of roof mounted equipment should be prohibited.
- Buildings and walls should be an environmentally sensitive color compatible with the earthen tones of the surrounding landscape.

- The developer should be required to submit a detailed lighting plan which provides only the amount of illumination needed and placed in such a manner as to shield the fixtures from casting light or glare onto surrounding development or hillsides.
- Night lighting of recreational facilities should be strictly regulated.

Although the mitigation measures were recommended in the 1986 EIR, the document also stated that the mitigation measures cannot be made for each and every viewshed which may be affected by the proposed development. Therefore, the EIR provided general recommendations, which would assure the least amount of impacts as a consequence of grading, the erection of structures and the landscaping of the project and how it would appear at maturity. The following recommendations were established as general mitigation measures to be applied, with discretion by City Staff, to reduce potential impacts to acceptable levels:

1. Roof top mounting of heating and/or air conditioning equipment shall be prohibited as shall the mounting of antennae or other visual obstruction not an integral portion of the structure.
2. An architectural theme shall be encouraged which takes advantage of low pitched or flat roof lines as are shown on the visual simulation. Flat or low pitched roofs on two story townhouses are shown at 25 feet above grade and are still within acceptable levels of line of sight. It should be noted, however, that City development standards limit the height of all structures to one story or 20 feet unless a greater height is expressly approved by the City. Maximum height of two stories is set forth in the City General Plan.
3. Buildings and walls should be of an environmentally sensitive color(s) which does not clash with the earthen tones established by the surrounding landscape.
4. Project landscaping should take into consideration the impact of tall trees and shrubs with large or bushy crowns, especially as they relate to non-project properties located adjacent to the development. Tall trees should be limited to palm trees so as to limit the screening of the landscape backdrop.
5. Encourage and review the developers plans for project lighting and assure compatible standards in the project regarding lighting types, kinds construction, installation and uses of outdoor illumination devices, lighting practices and systems which will conserve energy while providing adequate illumination to assure night-time safety, utility, and security.
6. Prior to the issuance of building plans, the developer shall submit detailed lighting plans indicating the location light fixtures, lamps supports, reflectors, and other fixture orientation. A description of same should include, but should not be limited to, catalogue cuts by manufacturers and drawings.
7. All outdoor lighting fixtures shall be fully shielded so that no light rays are emitted by the fixture above the horizontal plane, as certified by photometric test reports on each fixture.

8. Security sensitive areas, walks and landscaped areas shall be illuminated in a manner consistent with a quiet neighborhood residential area, relying on low profile and lower wattage. Excessive or unnecessary lighting should be avoided wherever possible.
9. The developer shall prohibit the use of metal halide lighting fixtures after 11 pm and installed only in enclosed luminaires.
10. The operation of search lights for advertising purposes shall be prohibited between 10 pm and sunrise.
11. Lighting for tennis courts and other intensely illuminated recreational facilities shall be prohibited from the hours of 10 pm to sunrise.

Alternative 4 would have created greater impacts to the project site compared to the proposed project. The increased residential density (530 units), variation of housing types and structure heights, and associated infrastructure would create greater impacts to the visual resources and ambient lighting compared to the existing Porcupine Creek property, and proposed Porcupine Creek Retreat.

### *Air Quality*

The development of Alternative 4 would create increased air quality impacts in association with the construction and operation of 530 residential units. Per the 1986 EIR, the generation and emission of pollutants associated with the development of the subject property included those associated with the site's development, the mobile source emissions associated with daily traffic to and from the development, and the stationary source emissions associated with the generation of electrical energy. While none of these sources of emissions were expected to, in and of themselves, significantly contribute to the degradation of air quality in the vicinity of the development or in those areas where electrical generating equipment is located, the 1986 EIR concluded that the Magnesia Falls Cove development would contribute to the cumulative impacts of development, travel and the generation of electricity. Under Alternative 4, impacts on air quality would result from emissions of contaminants generated directly at the project site and from indirect sources generated off-site. Sources of emission were categorized into stationary and mobile or motor vehicle sources. The two stages of on-site emissions generated were site grading and construction, and residential traffic of the completed project. Site preparation was characterized by grading operations and cut and fill transfers using heavy equipment. Additionally, consideration was given to fugitive dust generated during the construction of the development. Site disturbance associated with the planned development would involve approximately 119 acres in the main cove and the northwest and southwest coves. Therefore, the EIR recommended the following mitigation measures:

1. Mitigation measures to be implemented during the project construction phase shall include extensive site watering of disturbed areas. Project related cut and fill operations are not likely to require significant exporting or importing of soils, however, in those cases where soils are transported on or offsite tarps or other cover shall be utilized to reduce blowing of transported

materials. Special consideration should be given to the elementary school which has already been impacted by flood channel construction and are considered sensitive receptors.

2. Construction equipment and watering sources should be maintained on site. Grading should be carried out in a controlled and restrained manner, disturbing only those areas on which development is imminent. Special attention should be also given to areas set aside as mitigation for the loss of foraging habitat and those areas revegetating by the Army Corps.
3. The generation of vehicular emissions from construction equipment will be somewhat mitigated by regular onsite maintenance. Construction operations shall be discontinued, however, during first and second stage smog alerts, in accordance with AQMD regulations.
4. It is anticipated that power plant emissions will be further reduced as combustion technology improves, and alternative sources of electrical generation capacity, including wind turbines, come online. Plant emissions are monitored and regulated by the South Coast Air Quality Management District. Additional standards are set by the U.S. Environmental Protection Agency.
5. The major project impact will result from the vehicular emissions of residents and guests. While these emissions are beyond the direct control of the developer and local regulators, the State of California has implemented mandatory smog checks which will help to assure compliance with existing standards.

This Alternative would result in more air quality impacts compared to the project, as it would have developed a total of 530 residential units. The construction and operation of the 1986 EIR project would have resulted in the cumulative impacts of development, transportation, and generation of electricity and emissions.

### *Biological Resources*

At the time the Magnesia Falls Cove development EIR was written, impacts to biological resources included the removal of all native vegetation and most wildlife that occurred on site. the development would remove foraging area for raptors and other wide-ranging predators. The surrounding hillsides would also be subject to disturbance related to the likely need for water storage to be constructed at an elevation above the highest point of development, approximately at the 460-foot elevation.

Per the adopted 1986 EIR, the Magnesia Falls Cove development was required to include

1. The extensive use of a desert landscape theme with the development of a plant palette to be prepared with the assistance and certification of same by a certified wildlife biologist.
2. Every effort shall be made to enhance the habitat value of the development.
3. The sitting of water storage facilities shall be carried out with the cooperation of the California Department of Fish and Game, the Coachella Valley Water District, and City Staff and a certified wildlife biologist. Said storage facilities shall be constructed in a location and in such

as a manner as to minimize the impact of construction and operation on locally sensitive species.

The 1986 EIR concluded that careful adherence to mitigation measures and the recommendations of a certified wildlife biologist should reduce impacts to insignificant levels however the introduction of domestic animals could occur with this alternative. Domestic animals can cause impacts to surrounding native habitat and species. In comparison to the proposed Porcupine Creek Retreat Specific Plan project occurs in the existing developed Porcupine Creek Estate property. Impact to biological resources were mitigated during the development of the estate. Project related impacts to biological resources would be mitigated to less than significant levels.

### *Cultural Resources*

The 1986 EIR concluded that the Magnesia Falls Cove development would have directly affected nine different sites. Three sites were destroyed as a consequence of flood channel construction. Those archaeological resources which occurred within the development area would be destroyed and important information and data could be lost if construction proceeds in an unmitigated manner. Therefore, the 1986 EIR concluded that potential impacts of Alternative 4 could be significant, and recommended mitigation measures that include detailed field mapping prior to construction, the completion of a photographic survey, and the documentation of the findings. Adherence to the mitigation measures would reduce the impacts to archaeological resources to insignificant levels.

Under Alternative 4, the project property would have been developed into a residential community with single family and multi family developments. Construction of the buildings would involve grading which would disturb any subsurface cultural resources (historic or prehistoric) that was present at the project site.

### *Land Use and Planning*

Under Alternative 4, the Magnesia Falls Cove development proposed to amend the City General Plan on a 132.8-acre portion of a 305-acre holding from Very Low Density Residential to Low Density Residential. This land use was also defined as a Planned Unit Development (PUD) A in the General Plan's Land Use Plan. The proposed designation provides for single family and multi family dwellings functioning as a PUD.

A Change of Zone form was requested on the 132.8-acre proposed development area. The gross area proposed for the zone change was 147.9 acres and included approximately 15.1 acres in excess of 10 percent slope. The applicant anticipated a project buildout over a 10-year period which would continue to impact residential and elementary school facilities adjacent to the main access road. These impacts were not expected to exceed City noise design standards and construction activities were assumed not to be continuous over the 10 year build out period.

The third application submitted included a Tentative Tract Map No. 20916, which proposed to divide the development area into 7 single family courts and 6 multi-family courts. Multi-family structures are proposed for clusters of two-story townhomes. The average net density proposed across the 119 acres of subdivided land was approximately 4.5 units per acre. A density transfer was proposed as a part of the project.

The land use impact of Alternative 4 is greater than the impacts of the proposed project due to the increased density and use in the project area.

### *Traffic/Circulation*

The Magnesia Falls Cove development would develop 140 single family, and 390 multi family units. Trips generated as a consequence of the proposed development are distributed onto local roads. Based upon an average trip generation factor of 3,469 trips per day, times the average trip distance of 6 miles, yields approximately 20,814 trip miles per day.

The 1986 EIR concluded that traffic generated by the Magnesia Falls Cove development would deteriorate the existing poor LOS E average daily operations on Highway 111 from 39$^{th}$ Avenue to Desert Drive. Volume to capacity ratios were expected to increase from four percent to seven percent with development on an unmitigated project. At the time the Magnesia Falls Cove development EIR was written, the unmitigated conditions of the proposed Magnesia Falls development would degrade average daily levels of service on Highway 111 by an average five percent increase in the volume to capacity ratios.

Project related traffic was not expected to significantly impact vicinity roadway conditions. The proposed main access road for Alternative 4 was planned to be located on a private access road which would intersect with State Highway 111, west of Mirage Road and the Magnesia Flood Channel. From its intersection with Highway 111, the access road would proceed south, on property owned by the developer (at the time of the EIR), along the west flood channel to the development site. Construction of the project main access road would possibly have significant and potentially unmitigable impacts on the Rancho Mirage Elementary School, the flood control channel, and surrounding residences. Road construction activities, i.e. blasting would also act as an attractive nuisance with the potential of endangering neighborhood children. The feasibility of locating the access road between the mountain toe and the West Magnesia Canyon flood control channel is questionable. The development of the access road, as planned in the vicinity of the elementary school, poses significant and potentially unmitigable impacts to the area.

A number of mitigation measures were recommended to reduce the project related traffic impacts to acceptable levels. The construction of the proposed main access road would bypass the existing local road system presently serving the existing residential area, and thereby preclude direct impacts on these roads. It was further recommended that the main access road be reengineered so as to

preclude the need to use explosives or undertake major excavations, particularly in the vicinity of existing development.

Mitigation measures for traffic created by the Magnesia Falls Cove development included the following:

1. Locate a small, signalized access driveway anywhere between Paxton Drive and 500 feet west of the flood control channel bridge crossing (near Mirage Road) and restrict project and cumulative access to this area to the signalized driveway.
2. Construct the access driveway for two outbound lanes and two inbound lanes, with no curb cuts along the driveway for a length of 250 feet from the signal and no parking permitted on the access driveway.
3. Construct a separate right turn deceleration/acceleration lane on eastbound Highway 111 for approximate distances of 300 feet for deceleration and 440 feet for acceleration.
4. Stripe a westbound Highway 111 left turn land for a minimum 180 foot storage area plus transition striping to service project and cumulative development.
5. Apply Transportation System Management (TSM) measures along Highway 111 between 39th Avenue and Bob Hope Drive to include:
    a. Driveway consolidations to provide a minimum 200 foot spacing between driveways (250 foot spacing from a signalized intersection and/or restriction of nonconforming driveways to right turn in or right turn out).
    b. Provisions of separate right turn deceleration lanes at driveways with an average daily volume of at least 1,000 vehicles and an average peak hour inbound right turn volume of 40 vehicles.
    c. Limitation of driveways to one per parcel, unless the daily volume using one driveway would exceed 5,000 vehicles (both directions)
    d. Spacing of signalized intersections at one-quarter mile intervals to optimize traffic signal interconnect potential, and limiting signal installation to warranted locations.
6. Design and construction of the main access road shall be reconsidered and alternative plans should require little or no blasting. It is further recommended that the developer work with the Coachella Valley Water District, the Army Corps of Engineers and the City of Rancho Mirage to develop a plan to cross over the west flood control channel, as is proposed further south into the development, and that the alternative route be so designated as to preclude the need for blasting.
7. The developer shall provide for pedestrian and bicycle paths within the development and on the main access road. Plans for same should be required as part of a detailed street design and landscaping plan which should be required prior to the issuance of any grading or construction permits.

8. In the event that construction of the proposed main access road is not feasible, the developer shall initiate a redesign of the project, integrating those recommendations set forth in the Magnesia Cove Area Traffic Study, March 1985 and additional mitigation measures as may be set forth by the City.

Alternative 4 would create more impacts to traffic that the proposed project since the Magnesia Falls Cove development proposed 530 residential units. The increase of residential units creates an average trip generation factor of 3,469 trips per day and 20,814 trip miles per day, according to the 1986 EIR. In comparison, the Porcupine Creek project proposes 50 keys and 168 daily trips due to Retreat amenities and programming that encourage guests to remain onsite during their stay. Vehicular travel for the proposed project would include employee trips and guest arrival and departure.

### Summary of Comparative Impacts

A summary comparison of impacts associated with the project alternatives is provided in **Table 7.1, *Comparison of Alternatives to Project***. As described above, Alternative 4 would result in significant, mitigatable impacts regarding aesthetics, air quality, biological resources, cultural resources, land use and planning, and traffic and transportation.

#### *Relationship to Project Objectives*

The following project objections would not be achieved with Alternative 4:

- Repurpose Porcupine Creek as an exclusive, world-class retreat.
- Rezone the property to permit a retreat capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage.
- Maintain flexibility to respond to market conditions and evolving design needs.
- Ensure the high standards outlined in the development plan are maintained by adoption of Development Agreement.

## 7.5 Environmentally Superior Alternative

As previously discussed, analysis of a reasonable range of Alternatives is required by CEQA. The purpose of the Alternatives analysis is to explain potentially feasible ways to avoid or minimize the significant effects identified for the project. Furthermore, State CEQA Guidelines, Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative among those evaluated in an EIR.

A summary comparison of impacts associated with the project Alternatives is provided in **Table 7.1, *Comparison of Alternatives to Project***. As displayed in the table, the first row indicates the proposed project and alternatives, while the first column indicates the environmental topic. **Table 7.1** reveals the environmental impacts of the proposed project and whether Alternative 1, 2, or 3 reduces,

increases, or creates similar impacts to the proposed project. Of the Alternatives considered in this Draft EIR section, the No Project/2020 Buildout Alternative is environmentally superior to the other Alternatives because this Alternative would avoid the significant impacts identified for the project. This Alternative also reduces the environmental impacts the most, compared to the other alternatives.

Although Alternative 1 is environmentally superior, it does not meet the objectives of the proposed project. Alternative 1 would not require a Specific Plan that would provide a comprehensive land use plan that establishes development standards, land use regulation, and programs to guide the orderly transition/development of the property, while maintaining flexibility to respond to market conditions and evolving design needs. Under Alternative 1, the Porcupine Creek Estate would not be repurposed as an exclusive, world-class retreat, and would not be capable of generating Transient Occupancy Tax (TOT) and sales tax revenues for the City of Rancho Mirage. Finally, the No Project/2020 Buildout Alternative would not require the adoption of a Development Agreement.

Overall, the No Project/2020 Buildout is environmentally superior alternative, but it would not meet the project's purpose and objectives to the same extent as the proposed project. Of the remaining alternatives, Alternative 3 (reduced density retreat) would be the environmentally superior alternative because it would cause incremental reductions with respect to the environmental topics specified below. However, Alternative 3 will not substantially reduce or eliminate any significant and unavoidable impacts of the proposed project, and would also fail to adequately meet some of the proposed project's basic objectives, including creating a world-class retreat.

**Table 7.1 Comparison of Alternatives and Project**

| Environmental Topic | Impacts of the Proposed Project | Alternative 1 No Project – 2020 Buildout | Alternative 2 Standard Resort with 50 Keys | Alternative 3 Retreat with 2020 Buildout Only (Reduced Project) |
|---|---|---|---|---|
| Aesthetics | Less than Significant | Reduced (Less than Significant) | Greater (Less that Significant) | Reduced (Less than Significant) |
| Air Quality | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Biological Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Cultural Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Energy | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than Significant) |
| Geology and Soils | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than significant with Mitigation) | Reduced (Less than Significant) |
| Greenhouse Gas | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Hazards and Hazardous Materials | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than significant with mitigation) | Reduced (Less than significant) |
| Hydrology and Water Quality | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than significant) |
| Land Use and Planning | Less than Significant | Similar (Less than Significant) | Similar (Less than significant) | Similar (Less than Significant) |
| Noise | Less than Significant with Mitigation | Reduced (Less than Significant) | Greater (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Public Services | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Transportation | Less than Significant | Reduced (Less than Significant) | Greater (Less than Significant) | Reduced (Less than Significant) |
| Tribal Cultural Resources | Less than Significant with Mitigation | Reduced (Less than Significant) | Similar (Less than Significant with Mitigation) | Reduced (Less than Significant) |
| Utilities & Service Systems | Less than Significant | Reduced (Less than Significant) | Similar (Less than Significant) | Reduced (Less than Significant) |
| Wildfire | Less than Significant | Similar (Less than Significant) | Similar (Less than Significant) | Similar (Less than Significant) |

# Chapter 8.0 References

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## Chapter 4 Environmental Impact Analysis

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# Chapter 9.0 Glossary of Terms

| | |
|---|---|
| ACHP | Advisory Council on Historic Preservation |
| ADT | Average Daily Traffic |
| ANSI | American National Standards Institute |
| APSA | Aboveground Petroleum Storage Act |
| AQMP | Air Quality Management Plan |
| BACM | Best Available Dust Control Measures |
| BMP | Best Management Practices |
| BTU | British Thermal Unit |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CAFÉ | Corporate Average Fuel Economy |
| CALGreen | California's Green Building Standards |
| CalEPA | California Environmental Protection Agency |
| CalEEMod | California Emissions Estimator Model™ |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Caltrans | California Department of Transportation |
| CAP | Climate Action Plan |
| CAPCOA | California Air Pollution Officers Association |
| CARB | California Air Resources Board |

| | |
|---|---|
| CBC | California Building Code |
| CCA | Community Choice Aggregation |
| CCAA | California Clean Air Act |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) |
| CESA | California Endangered Species Act |
| CEQA | California Environmental Quality Act |
| cf | Cubic feet |
| CFGC | Californian Fish and Game Code |
| CFR | Code of Federal Regulations |
| $CH_4$ | Methane |
| CHP | California Highway Patrol |
| CIP | Capital Improvement Program |
| CIWMB | California Integrated Waste Management Board |
| CMA | Congestion Management Agency |
| CMP | Congestion Management Plan |
| CMS | Congestion Management System |
| CO | Carbon Monoxide |
| $CO_2e$ | Carbon dioxide equivalent |
| CPP | Clean Power Plan |

| | |
|---|---|
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CUPA | California Certified Unified Program Agencies |
| CVAG | Coachella Valley Association of Governments |
| CVCC | Coachella Valley Conservation Commission |
| CVMC | Coachella Valley Mountains Conservancy |
| CVMSHCP | Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan |
| CVSC | Coachella Valley Stormwater Channel |
| CVSIP | *Coachella Valley PM10 State Implementation Plan* |
| CVWD | Coachella Valley Water District |
| CVWMP | Coachella Valley Water Management Plan |
| CWA | Clean Water Act |
| CWA | Coachella Water Authority |
| dBA | A-weighted decibel |
| DBE | Design Basis Earthquake |
| DEH | Riverside County Department of Environmental Health |
| DOSH | Division of Occupational Safety and Health |
| DOT | United States Department of Transportation |
| DPR | Department of Pesticide Regulation |
| DTSC | Department of Toxic Substances Control |
| DWA | Desert Water Agency |
| DWR | California Department of Water Resources |

| | |
|---|---|
| EAP | Energy Action Plan |
| ECHO | Enforcement and Compliance History Online |
| EIC | Eastern Information Center |
| EIR | Environmental Impact Report |
| EISA | Energy Independence and Security Act of 2007 |
| EMS | emergency medical services |
| EPA | Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-To-Know Act |
| ePlan | Rancho Mirage Energy Action Plan |
| EPO | Environmental Protection and Oversight Division |
| °F | Fahrenheit (degrees) |
| FAA | Federal Aviation Agency |
| FEMA | Federal Emergency Management Agency |
| FERC | the Federal Energy Regulatory Commission |
| FESA | Endangered Species Act |
| FHSZ in SRA | Fire Hazard Severity Zones in State Responsibility Areas |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| FRAP | Fire and Resources Assessment Program |
| FTA | Federal Transit Administration |
| FTE | Full Time Equivalent |
| GCC | Global Climate Change |

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| GHG | greenhouse gas |
| GIS | Geographic Information Systems |
| GLO | U.S. General Land Office |
| GPS | Global Positioning System |
| GSA | Groundwater Sustainability Agency |
| GWh | Gigawatt Hours |
| HCP | Habitat Conservation Plans |
| HCFC | Hydrochlorofluorocarbons |
| HFC | Hydrofluorocarbons |
| HHW | Household Hazardous Waste Collection Program |
| HMBP | Hazardous Materials Business Plan Program |
| HSC | Health and Safety Code |
| HWCL | Hazardous Waste Control Law |
| Hz | Hertz |
| I-10 | Interstate 10 |
| IID | Imperial Irrigation District |
| ISO | Independent System Operator |
| ISTEA | Intermodal Surface Transportation Efficiency Acts of 1991 |
| ITE | Institute of Transportation Engineers |
| IWA | Indio Water Authority |
| LAQMP | Local Air Quality Management Plan |
| LEED | Leadership in Energy and Environmental Design |

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|---|---|
| LEPC | Local Emergency Planning Committee |
| LHMP | Local Hazard Mitigation Plan |
| LID | Low Impact Development |
| LOS | Level of Service |
| LST | Local Significance Threshold |
| LUST | Leaking Underground Storage Tank |
| MBTA | Migratory Bird Treaty Act |
| mgd | Million Gallons Per Day |
| MHFP | Rancho Mirage Multi-Hazard Functional Plan |
| $M_{max}$ | Maximum Moment Magnitude |
| MMT | Million Metric Tones |
| $MMTCO_2e$ | Million Metric Tones of Carbon Dioxide emissions |
| MS4 Permit | Whitewater River Region Municipal Separate Storm Sewer System Permit |
| $MTCO_2e$ | Metric Tones of Carbon Dioxide emissions |
| $M_w$ | Moment Magnitude |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NFA | National Fire Academy |
| NFIP | National Flood Insurance Program |
| NHPA | National Historic Preservation Act |
| NHTSA | National Highway Traffic Safety Administration |
| NIFC | National Interagency Fire Center |

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| NIOSH | National Institute for Occupational Safety and Health |
| NPDES | National Pollutant Discharge Elimination System |
| $N_2O$ | Nitrous Oxide |
| $NO_2$ | Nitrogen Dioxide |
| NOI | Notice of Intent |
| $NO_X$ | Nitrogen Oxide |
| NRHP | National Register of Historic Places |
| $O_3$ | Ozone |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OES | Office of Emergency Services |
| ONAC | Federal Office of Noise Abatement and Control |
| OPR | Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |
| Pb | Lead |
| PDP | Preliminary Development Plan |
| PFC | perfluorocarbons |
| PHMSA | Pipeline and Hazardous Materials Safety Administration |
| $PM_{10}$ / $PM_{2.5}$ | Particulate Matter (10 Microns / 2.5 Microns) |
| PPV | Peak Particle Velocity |
| PRC | Public Resources Code |
| PWS | Public Water System |
| RCDWR | Riverside County Department of Waste Resources |

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|---|---|
| RCFC&WCD | Riverside County Flood Control and Water Conservation District |
| RCFD | Riverside County Fire Department |
| RCMJLHMP | Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan |
| RCRA | Resource Conservation and Recovery Act of 1976 |
| RCTC | Riverside County Transportation Commission |
| REMEL | Reference Energy Mean Emission Level |
| Reservation | Agua Caliente Indian Reservation |
| RFS | Renewable Fuel Standard |
| RIVTAM | Riverside Transportation Analysis Model |
| RMEA | Rancho Mirage Energy Authority |
| RMGP | Rancho Mirage General Plan |
| RMMC | Rancho Mirage Municipal Code |
| RMS | Root Mean Squared |
| ROG | Reactive Organic Gas |
| RTIP | Regional Transportation Improvement Program |
| RTP | Regional Transportation Plan |
| RWCQB | Regional Water Quality Control Board |
| SCAB | South Coast Air Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCE | Southern California Edison |
| SCM | Seismic Coefficient Method |

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| SCS | Sustainable Communities Strategy |
| SDWA | Safe Drinking Water Act |
| SERC | State Emergency Response Commission |
| $SF_6$ | Sulfur Hexafluoride |
| SFHA | Special Flood Hazard Areas |
| SGMA | Sustainable Groundwater Management Act |
| SHMA | Seismic Hazards Mapping Act |
| SHMP | California State Hazard Mitigation Plan |
| SHPO | State Historic Preservation Officer |
| SIP | State Implementation Plans |
| $SO_2$ | Sulfur Dioxide |
| SOI | Sphere of Influence |
| SoCalGas | Southern California Gas Company (The Gas Company) |
| SOX | Sulfur Oxides |
| SP | Specific Plan |
| SPL | Sound Pressure Level |
| SRA | Source Receptor Areas |
| SRI | Statistical Research, Inc. |
| SSAB | Salton Sea Air Basin |
| SSMP | Sanitary Sewer Management Plan |
| SWP | State Water Project |
| SWPPP | Storm Water Pollution Prevention Plan |

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| SWRCB | State Water Resources Control Board |
| TAM | Transportation Assessment Memo |
| TAZ | Traffic Analysis Zone |
| TEA-21 | Transportation Equity Act for the 21st Century |
| TIA | Traffic Impact Analysis |
| TIP | Riverside County Transportation Improvement Plan |
| THPO | Tribal Historic Preservation Officer |
| TOT | Transit Occupancy Tax |
| TPPS | Transportation Project Priority Study |
| TRB | Transportation Research Board |
| TRI | Toxics Release Inventory |
| TUA | Traditional Use Area |
| TUMF | Transportation Uniform Mitigation Fee |
| UBC | Uniform Building Code |
| USACE | United States Army Corps of Engineers |
| USEPA | United States Environmental Protection Agency |
| USFA | United States Fire Administration |
| USFWS | United States Fish and Wildlife Service |
| USGBC | United States Green Building Council |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |
| UWMPA | Urban Water Management Planning Act |

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| VdB | Vibration Level |
| VHFSZ in LRA | Very High Fire Severity Zone in Local Responsibility Areas |
| VMT | Vehicle Miles Traveled |
| VOC | Volatile Organic Compounds |
| WDID | Waste Discharge Identification |
| WGCEP | Working Group of California Earthquake Probabilities |
| WRPs | Water Reclamation Plants |
| WSA | Water Supply Assessment |
| WQMP | Water Quality Management Plan |