APPENDIX C

Habitat Assessment and Coachella Valley Multiple Species Habitat

Conservation Plan Consistency Report

Desert Willow Golf Resort Project Site

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HABITAT ASSESSMENT AND COACHELLA VALLEY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY REPORT

DESERT WILLOW GOLF RESORT PROJECT SITE
CITY OF PALM DESERT, RIVERSIDE COUNTY, CALIFORNIA

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1.0 INTRODUCTION

This report presents the results of a general biological resources assessment conducted by Wood Environment and Infrastructure Inc. (Wood E&I) (formerly Amec Foster Wheeler) for the proposed Desert Willow Golf Resort Project (project), Assessor's Parcel Numbers (APN) 620-042-023, 620-042-024, and 620-040-008, located in the city of Palm Desert, Riverside County, California. Wood E&I was contracted to perform this work by Terra Nova Planning and Research (Terra Nova). Wood E&I's role as a sub-consultant to Terra Nova, is to provide biological studies for incorporation into the CEQA document(s). This report presents the regulatory framework, methods, and results of a baseline biological survey for the proposed project.

1.1 Project Description

The proposed project includes the development of a resort complex that will include approximately 300 hotel rooms and a surf lagoon within the existing Desert Willow Golf Resort.

1.2 Project Site Location/Existing Conditions

The project site is located east of Portola Avenue, north of Country Club Drive, west of Cook Street, and south of Frank Sinatra Drive; within the Desert Willow Golf Resort (Figure 1). Specifically, the project site is located within portions of Section 4, Township 5 South, Range 6 East as shown on the United States Geological Survey (USGS) Myoma, California, 7.5-minute topographic quadrangle (Figure 2). The geographic coordinates near the approximate "middle" of the project survey area are 33°45'50.54" North latitude and -116°22'01.98" West longitudes. The elevation at this "center point" is 260 feet above mean sea level (amsl). As mentioned above, the project is located on three parcels. The smallest and northernmost parcel, APN 620-400-008 is approximately 0.88 acres and with the exception of a small area of landscaping on the western portion, is completely developed as a parking lot. APN 620-420-024 (bordering -008 to the south) is approximately 2.15 acres and is also almost completely developed as a parking lot. The largest and southernmost parcel, APN 620-420-023 is approximately 14.65 acres and consists mostly of fallow, undeveloped land. This parcel appears to have been cleared in the somewhat recent past, as evidenced by remnants of a sprinkler system, and signs of having been graded.

The survey area lies at an elevation of approximately 247 feet to 263 feet (amsl). The average rainfall for the area is 3.47 inches per year and no recorded snowfall (US Climate Data 2017). Weather data was recorded at the Indio Fire Station (Latitude 33.7086, Longitude: -116.215) approximately 9.4 miles south/southeast of the project site.

The USDA online Web Soil Survey (based on the Riverside County, Coachella Valley Area, California Soil Survey) (Soil Survey Staff 2017) was consulted to determine the soil types mapped as occurring within the project area. The study area contains two different soil types (Figure 3) including:

- Myoma fine sand (MaB) – A nearly level soil (0 to 5 percent slopes) that is found on alluvial fans, lacustrine basins, and flood plains of the Coachella Valley.
- Myoma fine sand (MaD) – A moderately sloping to rolling soil (5 to 15 percent slopes) that is found on dunes and alluvial fans.

Prepared By: Mindy Beohm, AMEC FW Source: ESRI Imagery

Date: 7/16/2018

Vicinity & Location
Desert Willow Golf Course

FIGURE
1

amec foster wheeler

Prepared By: Mindy Beohm, AMEC FW Source: soilmu_ca_680

Soils
Desert Willow Golf Course

FIGURE
3

1.3 Regulatory Framework

1.3.1 Federal

Endangered Species Act (ESA) – The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies accountable for administering the ESA. The ESA defines species as "endangered" or "threatened" and provides regulatory protection at the federal level.

- Section 9 of the ESA prohibits the "take" of listed (i.e., endangered or threatened) species. The ESA's definition of take is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct." Recognizing that take cannot always be avoided, Section 10(a) includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities. Specifically, Section 10(a) (1) (A) permits (authorized take permits) are issued for scientific purposes. Section 10(a) (1) (B) permits (incidental take permits) are issued for the incidental take of listed species that does not jeopardize the species.
- Section 7 (a) (2) requires federal agencies to evaluate the proposed project with respect to listed or proposed listed, species and their respective critical habitat (if applicable). Federal agencies must employ programs for the conservation of listed species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined by the ESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding.

Section 10(a) of the ESA authorizes the issuance of incidental take permits and establishes standards for the content of habitat conservation plans (see Section 3.3 below).

Migratory Bird Treaty Act (MBTA) – Treaties signed by the U.S., Great Britain, Mexico, Japan, and the countries of the former Soviet Union make it unlawful to pursue, capture, kill, and/or possess, or attempt to engage in any such conduct to any migratory bird, nest, egg or parts thereof listed in the document. As with the ESA, the MBTA also allows the Secretary of the Interior to grant permits for the incidental take of these protected migratory bird species.

National Environmental Policy Act (NEPA) – If portions of a proposed project could fall under the jurisdiction of a federal agency (i.e., U.S. Bureau of Reclamation, U.S. Army Corps of Engineers) they are subject to environmental review pursuant to NEPA. NEPA establishes certain criteria that must be adhered to for any project that is "financed, assisted, conducted or approved" by a federal agency. The federal lead agency is required to "determine whether the proposed action will significantly affect the quality of the human environment."

Section 404 of the Clean Water Act – This section of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), regulates the discharge of dredged and fill material into "waters of the United States." The USACE has created a series of nationwide permits that authorize certain activities within waters of the U.S. provided that the proposed activity does not exceed the impact threshold of 0.5 acre for nationwide permits, takes steps to avoid impacts to wetlands and other designated U.S. waters where practicable, minimizes potential impacts to wetlands, and provides compensation for any remaining, unavoidable impacts through activities to restore or create wetlands. For projects that exceed the threshold for nationwide permits,

individual permits under Section 404 can be issued. An inspection of the project site to determine

presence or absence of potential jurisdictional wetlands and waters was conducted during the above mentioned general biological assessment.

1.3.2 State

California Endangered Species Act (CESA) – This legislation is similar to the federal ESA, but it is administered by the California Department of Fish and Wildlife (CDFW – formerly Department of Fish and Game). The CDFW is authorized to enter into "memoranda of understanding" with individuals, public agencies, and other institutions to import, export, take, or possess state-listed species for scientific, educational, or management purposes. CESA prohibits the take of state-listed species except as otherwise provided in state law. Unlike the federal ESA, the CESA applies the take prohibitions to species currently petitioned for state-listing status (candidate species). State lead agencies are required to consult with CDFW to ensure that actions are not likely to jeopardize the continued existence of any state-listed species or result in the destruction or degradation of occupied habitat.

California Environmental Quality Act (CEQA) – The basic goal of CEQA is to maintain a high-quality environment now and in the future. The specific goals are for California's public agencies to:

1) identify the significant environmental effects of their actions; and, either
2) avoid those significant environmental effects, where feasible; or
3) mitigate those significant environmental effects, where feasible.

CEQA applies to "projects" proposed to be undertaken or requiring approval by state and local government agencies. Projects are activities that have the potential to have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits and the approval of tentative subdivision maps. Where a project requires approvals from more than one public agency, CEQA requires one of these public agencies to serve as the "lead agency."

A "lead agency" must complete the environmental review process required by CEQA. The most basic steps of the environmental review process are to:

4) Determine if the activity is a "project" subject to CEQA;
5) Determine if the "project" is exempt from CEQA;
6) Perform an Initial Study to identify the environmental impacts of the project and determine whether the identified impacts are "significant". Based on its findings of "significance", the lead agency prepares one of the following environmental review documents:
    a) Negative Declaration if it finds no "significant" impacts;
    b) Mitigated Negative Declaration if it finds "significant" impacts but revises the project to avoid or mitigate those significant impacts;
    c) Environmental Impact Report (EIR) if it finds "significant" impacts.

While there is no ironclad definition of "significance", Article 5 of the State CEQA Guidelines provides criteria to lead agencies in determining whether a project may have significant effects.

The Native Plant Protection Act (NPPA) – The NPPA includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for "rare and endangered"

are different from those contained in CESA. However, the list of species afforded protection in accordance with the NPPA includes those listed as rare and endangered under CESA. NPPA provides limitations on take as follows: “no person will import into this state, or take, possess, or sell within this state” any rare or endangered native plants, except in accordance with the provisions outlined in the act. If a landowner is notified by CDFW, pursuant to section 1903.5 that a rare or endangered plant is growing on their property, the landowner shall notify CDFW at least 10 days prior to the changing of land uses to allow CDFW to salvage the plants.

Natural Community Conservation Planning (NCCP) Program – A NCCP, which is managed by the CDFW, is intended to conserve multiple species and their associated habitats, while also providing for compatible use of private lands. Through local planning, the NCCP planning process is designed to provide protection for wildlife and natural habitats before the environment becomes so fragmented or degraded by development that species listing are required under CESA. Instead of conserving small, often isolated “islands” of habitat for just one listed species, agencies, local jurisdictions, and/or other interested parties have an opportunity through the NCCP to work cooperatively to develop plans that consider broad areas of land for conservation that would provide habitat for many species. Partners enroll in the programs and, by mutual consent, areas considered to have high conservation priorities or values are set aside and protected from development. Partners may also agree to study, monitor, and develop management plans for these high value “reserve” areas. The NCCP provides an avenue for fostering economic growth by allowing approved development in areas with lower conservation value. The project site is in a combined Habitat Conservation Plan (HCP) / NCCP, see Section 1.3.3.

Sections 1600-1603 of the State Fish and Game Code – The California Fish and Game (Wildlife) Code, pursuant to Sections 1600 through 1603, regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources. Under state code, CDFW jurisdiction is assessed in the field based on one, or a combination, of the following criteria:

7) At minimum, intermittent and seasonal flow through a bed or channel with banks and that also supports fish or other aquatic life.
8) A watercourse having a surface or subsurface flow regime that supports or that has supported riparian vegetation.
9) Hydrogeomorphically distinct top-of-embankment to top-of-embankment limits.
10) Outer ground cover and canopy extents of, typically, riparian associated vegetation species that would be sustained by surface and/or subsurface waters of the watercourse.

The CDFW requires that public and private interests apply for a “Streambed Alteration Agreement” for any project that may impact a streambed or wetland. The CDFW has maintained a “no net loss” policy regarding impacts to streams and waterways and requires replacement of lost habitats on at least a 1:1 ratio.

Section 2081 of the State Fish and Game Code – Under Section 2081 of the California Fish and Game Code, the CDFW authorizes individuals or public agencies to import, export, take, or possess state endangered, threatened, or candidate species in California through permits or memoranda of understanding. These acts, which are otherwise prohibited, may be authorized through permits or “memoranda of understanding” if (1) the take is incidental to otherwise lawful activities, (2) impacts of the take are minimized and fully mitigated, (3) the permit is consistent

with regulations adopted in accordance with any recovery plan for the species in question, and (4) the applicant ensures suitable funding to implement the measures required by the CDFW. The CDFW shall make this determination based on the best scientific information reasonably available and shall include consideration of the species' capability to survive and reproduce.

Section 3505.5 of the State Fish and Game Code – This section makes it unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey, e.g.: owls, hawks, eagles, etc.) or to take, possess, or destroy the nest or eggs of any bird-of-prey.

1.3.3 CVAG/Coachella Valley Conservation Commission

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)/ NCCP – Subsequent to the establishment of the Fringe-toed Lizard HCP in the early 1980s, continued growth in the Coachella Valley impacted other species and their habitats. Several species that occur in the Coachella Valley have been listed as threatened or endangered, and several more have been proposed for listing or identified as candidates for listing. A scoping study was prepared for the Coachella Valley Association of Governments (CVAG) by the Coachella Valley Mountains Conservancy (Conservancy) in 1994. It was recommended that a Multiple Species Habitat Conservation Plan (MSHCP) be prepared for the entire Coachella Valley and surrounding mountains to address potential state and federal Endangered Species Act issues in the proposed MSHCP area. Subsequently, a Memorandum of Understanding (MOU) was developed to govern the preparation of the MSHCP. In late 1995 and early 1996, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage, Coachella Valley Water District, Riverside County Flood Control and Water Conservation District, Imperial Irrigation District, the County of Riverside, USFWS, CDFW, the Bureau of Land Management (BLM), the U. S. Forest Service (USFS), and the National Park Service (NPS) signed the MOU to initiate the planning effort. In late 1996 and early 1997 the parties to the MOU approved an amendment stipulating that the MSHCP will meet the intent of the Natural Community Conservation Planning (NCCP) Act as well as the California Endangered Species Act (CESA) and the Federal Endangered Species Act (FESA), and, further, that the MOU constitutes an agreement to prepare a NCCP. Final state and federal resource agency approval and permitting for the CVMSHCP occurred in September and October 2008.

Preparation of the CVMSHCP serves two main purposes: balancing environmental protection and economic development objectives in the CVMSHCP area, and simplifying compliance with endangered species related laws. The CVMSHCP intends to accomplish this through the following means.

Conserving adequate habitat in an unfragmented manner to provide for the protection and security of long-term viable populations of the species that are either currently listed as threatened or endangered, are proposed for listing, or are believed by the Scientific Advisory Committee, USFWS and CDFW, to have a high probability of being proposed for listing in the future if not protected by the CVMSHCP. It is intended to proactively address requirements of the state and federal endangered species acts to avoid disruption of economic development activities in the CVMSHCP area.

For species that are currently listed as threatened or endangered, the CVMSHCP is the basis for securing incidental take permits. For species that are not currently listed, the CVMSHCP addresses the conservation of the species and its habitat as if the species were listed, so that if the species is subsequently listed, an incidental take permit will be issued on the basis of the

CVMSHCP, and no further mitigation requirements will be imposed. A further goal of the plan is to remove the need to list species as threatened or endangered by taking proactive conservation measures.

It should be recognized that the CVMSHCP does not address Section 404 of the Clean Water Act nor the Streambed Alteration Agreement provisions of the California Fish and Game Code, (Section 1600). Projects that currently require a Section 404 permit or Streambed Alteration Agreement will continue to do so notwithstanding the CVMSHCP. Additionally, the CVMSHCP does not provide a means of compliance with the federal Migratory Bird Treaty Act (MBTA).

The Riverside County Land Information System website and title report on the subject property were consulted to determine the parcel numbers that were surveyed on the subject project site, and their status with regards to the various county plan areas. The subject parcels fall within the CVMSHCP Fee Area (please see Section 4.3 for an explanation of requirements for the Conservation and Fee Area as related to this project).

2.0 METHODS

Methods employed in the performance of this biological assessment consisted of a literature review, followed by a site survey to obtain a general inventory of plant and wildlife species on the project site; and to determine the potential for, or presence of, sensitive biological resources or their habitat on the project site. In addition to the general biological assessment described herein, a Wood E&I biologist also performed a habitat assessment for burrowing owl (*Athene cunicularia*) on the project site in accordance with the methodology presented in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game, March 7, 2012).

2.1 Literature Review

A literature review was conducted to identify sensitive biological resources known from the vicinity of the project site. This included consultation with the California Department of Fish and Wildlife's California Natural Diversity Data Base (CDFW 2018a) and a review of the California Native Plant Society's (CNPS) *Rare and Endangered Vascular Plants of California* (2018). The CVMSHCP was also reviewed CVMSHCP 2017). Pertinent documents from the Wood E&I library and files were also consulted.

2.2 Biological Reconnaissance of the Project Site

The project site was surveyed on foot by senior Wood E&I wildlife biologist Nathan Moorhatch on 18 July, 2018. Weather conditions were warm (86-95°F), with partly cloudy skies (75-65%) and generally low wind (0-5 miles per hour). Land use adjacent to the project site is primarily surrounded by the Desert Willow Golf Resort and associated parking for the golf course, with some development (business) to the west/southwest. The majority of the 500 foot buffer area (surveyed for potential burrowing owl habitat) was located on the developed land (golf course) surrounding the boundaries of the undeveloped, disturbed portion of the site and along the boundaries of the developed (parking lot) portions of the site.

The assessment of the potential for occurrence of sensitive biological resources known from the project vicinity was based on geographic range, CNDDB records, habitat associations, general site conditions, and soil types. All plant and vertebrate species observed were recorded in field notes. Unobserved wildlife species were identified through indirect sign (*e.g*. scat, tracks, nests, burrows, etc.). Bird species were identified through binoculars, and by vocalizations. Scientific nomenclature for this report is from the following standard reference sources: plant communities (Holland 1986, Sawyer et al 2009, CVMSHCP 2017), reptiles and amphibians (Stebbins 2003);

birds (California Bird Records Committee 2017); and mammals (CDFG 2016). Vegetation nomenclature follows The Jepson Manual, Vascular Plants of California, 2nd Edition (Baldwin 2012) and the online version (Jepson 2017). When The Jepson Manual does not list a common name, common name nomenclature follows the United States Department of Agriculture, Natural Resources Conservation Service (USDA) Plants Database (USDA 2017).

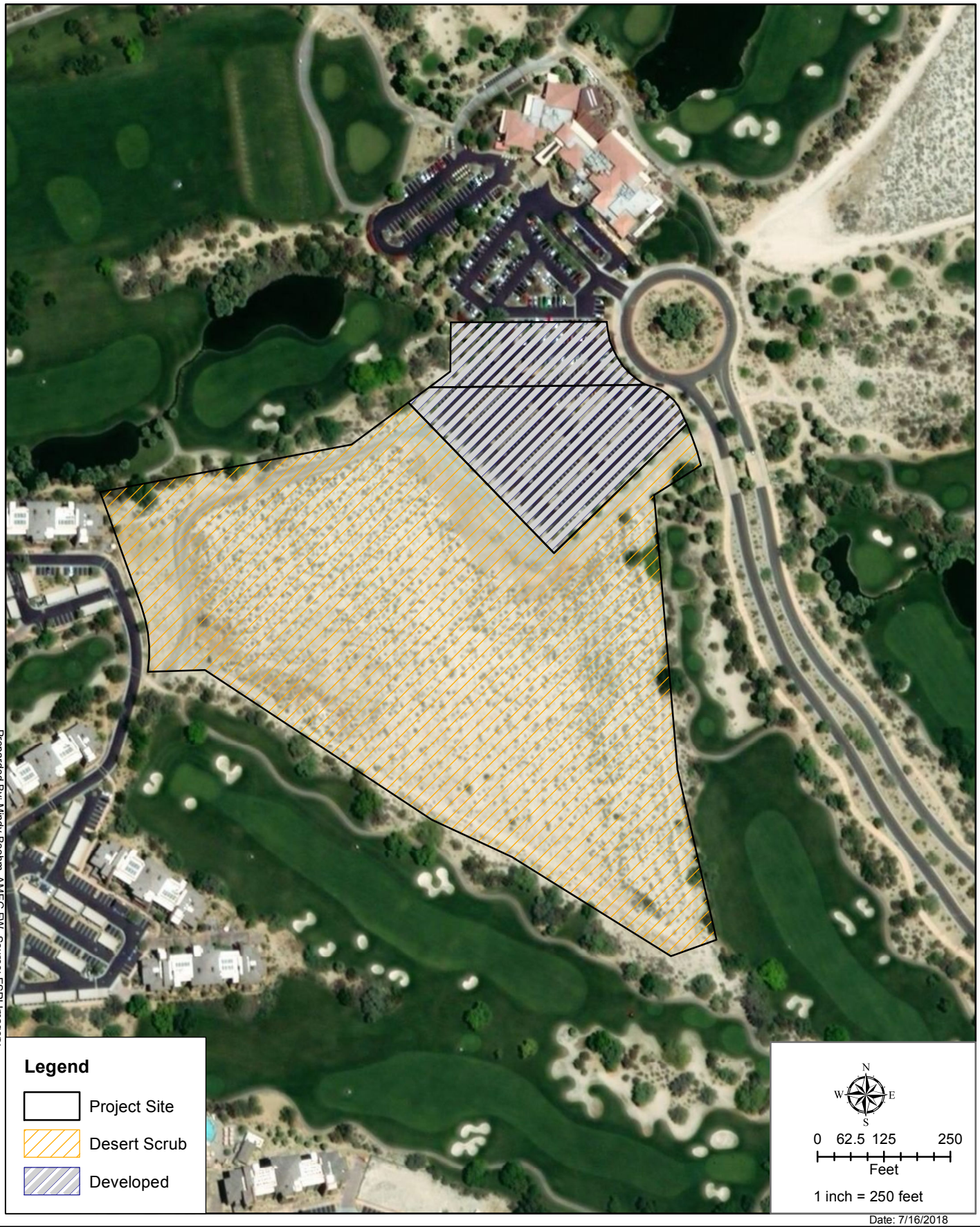
3.0 RESULTS

3.1 Vegetation Communities and Flora Species

Appendix A includes the scientific and common names for plant species identified during the surveys. A total of twenty-three (23) plant species were identified during the field survey.

The study area is located within, and surrounded by, the existing Desert Willow Golf Resort and has experienced extensive development/disturbance. The two northernmost parcels have largely been developed as paved parking lots, with only the southern (14.65 acre) parcel containing some semblance of a native plant community. As discussed previously in Section 1.2, this parcel appears to have been cleared in the recent past for development, as there are remains of a sprinkler system present (both PVC pipes and an upright “rainbird” sprinkler head were observed on this parcel – see photos 3 & 4 in Appendix 2). The project site is dominated by brittle bush scrub habitat [*Encelia farinosa* Shrubland Alliance]. This plant community doesn’t favor sandy soils, so its presence on this site likely indicates that it represents an early regrowth of what was originally a Creosote bush – brittle bush scrub [*Larrea tridentata – Encelia farinosa* Shrubland Alliance]. This parcel is dominated by brittle bush, with other native plants observed including: scattered broom baccharis (*Baccharis sarothroides*), California croton (*Croton californicus*), scalebroom (*Lepidospartum squamatum*), Emory’s indigo bush (*Psorothamnus emoryi*), and desert twinbugs (*Dicoria canescens*). Other native species noted around the surrounding margins of the golf course (some of which were likely planted, some possibly remnants from predevelopment times) included: chuparosa (*Justicia californica*), honey mesquite (*Prosopis glandulosa* var. *torreyana*), creosote bush (*Larrea tridentata*), blue palo verde (*Parkinsonia florida*), California fan palm (*Washingtonia filifera*), and desert willow (*Chilopsis linearis* ssp. *arcuata*). Non-native plants (many of them landscape plantings) identified onsite included: Peruvian pepper (*Schinus molle*), oleander (*Nerium oleander*), three different acacias including shoestring acacia (*Acacia stenophylla*), Indian rosewood (*Dalbergia sissoo*), ejoton (*Ebenopsis confinis*), and saltcedar (*Tamarix ramosissima*).

The project site is located within an area surrounded by a mixture of golf resort development, residential areas, and low density commercial development (see Photos 7 & 12 in Appendix 2).



Prepared By: Mindy Beohm, AMEC FW Source: ESRI Imagery

Date: 7/16/2018

Vegetation
Desert Willow Golf Course

FIGURE
2

3.2 Wildlife

A total of thirteen vertebrate wildlife species (twelve birds and one reptile) were detected by direct observation or sign within the survey area. Additionally, eight dragonfly species were observed on the survey area. The inventory was limited by the seasonal timing and short duration of the survey period, and by the nocturnal and fossorial habits of many animals.

The project site exhibits extensive evidence of disturbance such as conversion to asphalt parking areas, clearance of land including for dirt roads, and former clearing and irrigation (presumably for development that did not proceed to completion). Although the majority of the project site contains evidence of previous disturbance, there are native shrubs scattered throughout the largest parcel (APN 620-420-023). The disturbed nature of much of the project site reduces the potential for use of the site by a greater variety of desert reptiles, birds, and mammals, as many of these species require better quality natural habitats, and some are substrate specialists (typically on dunes or wind-deposited sands – not very well represented on most of the site). The project site is an "island" of degraded and/or fully developed land surrounded by varying forms of development.

Birds observed during the survey included a mix of species common to desert scrub and developed areas of the Coachella Valley. Some of the birds observed included: Eurasian collared-dove (*Streptopelia decaocto*), western kingbird (*Tyrannus verticalis*), verdin (*Auriparus flaviceps*), Bewick's wren (*Thryomanes bewickii*), common raven (*Corvus corax*), greater roadrunner (*Geococcyx californianus),* mourning dove (*Zenaida macroura*), Costa's hummingbird (*Calypte costae*), and lesser nighthawk (*Chordeiles acutipennis*). No nesting birds were detected on or adjacent to the site during the survey. One reptile was observed: desert iguana (*Dipsosaurus dorsalis*), although other common species including side-blotched lizard (*Uta stansburiana*) and Great Basin whiptail (*Aspidoscelis tigris tigris*) would also be expected to utilize the survey area.

3.3 Sensitive Elements

Plant or animal taxa may be considered "sensitive" due to declining populations, vulnerability to habitat change or loss, or because of restricted distributions. Certain sensitive species have been listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or by the CDFW, and are protected by the federal and state Endangered Species Acts and the California Native Plant Protection Act. Other species have been identified as sensitive by the USFWS, the CDFW, or by private conservation organizations, including the CNPS, but have not been formally listed as threatened or endangered. Such species can still be considered significant under the California Environmental Quality Act (CEQA).

The literature review and Wood E&I biologists' knowledge of the project vicinity indicated that as many as 43 sensitive biological resources potentially occur in the general vicinity of the project site. For a summary of sensitive species and habitats known to occur or potentially occurring in the vicinity of the project site, see Tables 1 through 3.

Table 1. Sensitive Plants: Desert Willow Golf Resort Project

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Abronia villosa var. aurita Chaparral sand-verbena	F: ND C: ND CNPS: List 1B.1 State Rank: S2.1 CVMSHCP: No	Annual herb found in sandy areas in chaparral and coastal sage scrub habitats, at 262 to 5,249 feet	January - August	**Absent** (marginal habitat present on one parcel but species not observed during survey).
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S2.1 CVMSHCP: Yes	Annual/Perennial herb found in sandy flats, washes, alluvial fans, sand field, dunes and dune edges, at 130 to 2,150 feet, a CA endemic.	February - May	**Low** (Remnant, loose sand areas are present, species not observed during surveys.)
Astragalus preussil var. laxiflorus Lancaster milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S2 CVMSHCP: No	Perennial herb found on alkaline clay flats, gravelly or desert washes; occurs almost always under natural conditions in non-wetlands in California.	March-May	**Absent** (Habitat not present on site); nearest CNDBB is historical (1928) and is over ten miles southeast of site.
Astragalus tricarinatus Triple-ribbed milk-vetch	F: END C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: Yes	Rocky canyon slopes, edges of boulder-strewn desert washes, at 1,400 to 2,600 feet elevation	February - May	**Absent** (No suitable habitat (rocky canyon slopes) on site. Site is well below known elevation range of species).
Ditaxis claryana Glandular ditaxis	F: ND C: ND CNPS List: 2B.2 State Rank: S1 CVMSHCP: Yes	Sandy soils in creosote bush scrub of the Sonoran and Mojave deserts below 1,500 feet. Imperial, Riverside, and San Bernardino Counties, and Arizona and northern Mexico.	October - March	**Very low** (Disturbed scrub habitat is present onsite; however nearest CNDBB is historical (1906) and is over three miles south of site).
Ditaxis serrata var. *californica* California ditaxis	F: ND C: ND CNPS List: 3.2 State Rank: S2? CVMSHCP: No	On sandy washes and alluvial fans of the foothills and lower desert slopes. 100-3,280 feet elevation.	March - December	**Absent** (no habitat onsite, no Ditaxis species observed onsite during survey, CNDDB records are from >4 mi. S of site in foothills and mtn. slopes)
Eremothera boothii ssp. boothii Booth's evening-primrose	F: ND C: ND CNPS List: 2B.3 State Rank: S2 CVMSHCP: No	Annual herb found in Joshua tree woodland, pinyon and juniper woodland at 2,670 to 7,875 feet elevation.	April-September	**Absent** (no habitat onsite, site is below elevation range of species).

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Euphorbia abramsiana Abrams' spurge	F: ND C: ND CNPS List: 2B.2 State Rank: S2 CVMSHCP: No	Annual herb found in sandy Mojavean desert scrub and Sonoran Desert scrub at 15 to 4,300 feet elevations.	(August) September-November	**Low** (Marginally suitable habitat onsite, historic (1968) CNDDB record from ~ 2 mi. E of site, but now developed, not observed onsite).
Euphorbia arizonica Arizona spurge	F: ND C: ND CNPS List: 2B.3 State Rank: S3 CVMSHCP: No	Perennial herb found in sandy Sonoran Desert scrub habitat at 492 to 2,950 feet elevations.	March-April	**Absent** (Low quality habitat onsite, but site is below elevational range of species, extensively disturbed).
Euphorbia platysperma Flat-seeded spurge	F: ND C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: No	Annual herb found in desert dunes and Sonoran desert scrub habitat at 210 to 330 feet elevations.	February-September	**Very Low** (Marginal habitat onsite, not found during survey).
Marina orcuttii var. *orcuttii* California marina	F: ND C: ND CNPS List: 1B.2 State Rank: S1 CVMSHCP: No	Pinyon and Juniper woodland, Sonoran Desert scrub, Chaparral, 1,200-3,805 feet elevation	May - October	**Absent** (No suitable habitat and site too low in elevation)
Matelea parvifolia spear-leaf matelea	F: ND C: ND CNPS List: 2B.3 State Rank: S3 CVMSHCP: No	Dry rocky ledges and slopes in Sonoran Desert scrub, 1.590 – 4,725 feet elevation.	March – May (July)	**Absent** (No suitable habitat and site too low in elevation)
Nemacaulis denudata var. *gracilis* slender cottonheads	F: None C: None CNPS: List 2B.2 State Rank: S2 CVMSHCP: No	Sandy places in coastal dunes, desert dunes, & Sonoran Desert scrub. 164-1312 ft.	Mar – May	**Low** (Dune habitats lacking, 1978 CNDDB record from ~ 5 mi. SE of site, now developed)
Petalonyx linearis Narrow-leaf sandpaper-plant	F: ND C: ND CNPS: List 2B.3 State Rank: S2 CVMSHCP: No	Perennial shrub found in Sonoran desert scrub and/or Mojavean desert scrub in sandy or rocky canyons at 82 to 3,660 feet elevation.	(January-February) March-May (June-December)	**Absent** (No suitable habitat onsite, site is not in or near canyons, species not observed during surveys).
Pseudorontium cyathiferum Deep Canyon snapdragon	F: ND C: ND CNPS: List 2B.3 State Rank: S1 CVMSHCP: No	Rocky sites in Sonoran Desert scrub, 0- 2,625 feet.	February - April	**Absent** (No suitable habitat on site, in CA only known from Deep Canyon)

Species	Protective Status	Habitat	Flowering Period	Occurrence Probability
Selaginella eremophila desert spike-moss	F: None C: None CNPS: List 2B.2 Global Rank: G4 State Rank: S2S3 CVMSHCP: No	Chaparral, Sonoran Desert scrub; shaded sites, gravelly soils, crevices or among rocks. 656-2953 ft. elevation	May–July	**Absent** (No habitat present, Site below elevation range of species)
Stemodia durantifolia purple stemodia	F: None C: None CNPS: List 2B.1 State Rank: S2 CVMSHCP: No	Mesic sites on sandy soils in Sonoran Desert scrub; 591-984 ft. elevation.	Jan-Dec	**Absent** (Mesic habitat lacking; site below elevation range of species)
Xylorhiza cognata Mecca-aster	F: ND C: ND CNPS: List 1B.2 State Rank: S2 CVMSHCP: Yes	Perennial herb that grows on steep canyon slopes on sandstone and clay substrates, 65 to 1,000 feet elevation	January - June	**Absent** (No suitable habitat (steep canyon slopes on sandstone and clay substrates) onsite).

Table 2. Sensitive Habitats: Desert Willow Golf Resort Project

Habitat	Protective Status (F=Federal, C=California)	Occurrence Probability
Desert Fan Palm Oasis Woodland	F: ND C: ND State rank: S3.2 CVMSHCP: No	**Absent**

Table 3. Sensitive Wildlife Species: Desert Willow Golf Resort Project

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Invertebrates			
Dinacoma caseyi Casey's June beetle	F: END C: None State Rank: S1 CVMSHCP: No	Restricted to Palm Canyon Wash and the adjacent floodplain of Palm Canyon in sandy soils.	**Absent** (Site is not located within known range of species, site is ~ 6.4 mi. E/SE of Official Survey Area)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Macrobaenetes valgum Coachella Giant Sand Treader Cricket	F: ND C: ND State rank: S1S2 CVMSHCP: Yes	Wind-swept deposited sand dune ridges, winter/spring-dampened sandy areas. Restricted to Coachella Valley.	**Absent** (No suitable habitat present on-site [wind-swept deposited sand dune ridges], nearest CNDDB record [1959], ~ 2 mi. SW of site, now developed).
Stenopelmatus cahuilaensis Coachella Valley Jerusalem cricket	F: None C: None State Rank: S1S2 CVMSHCP: Yes	Wind-deposited (aeolian) sand dunes, drift sands and water deposited (alluvial) gravelly/sandy soils	**Absent** (Habitat lacking [too disturbed], CNDDB record from ~ 4.2 mi. NW of site)
Oliarces clara Cheeseweed Owlfly (cheeseweed moth lacewing)	F: ND C: ND State rank: S2 CVMSHCP: No	Known from lower Colorado River drainage, Associated with creosote bush (*Larrea tridentata*) in desert scrub; creosote is suspected larval host. Found under rocks or in flight over streams.	**Absent** (Habitat not present, no river drainages or washes occur on the site).
Fish			
Cyprinodon macularius Desert Pupfish	F: END C: END State rank: S1 CVMSHCP: Yes	Desert ponds, springs, marshes, and streams	**Absent** (No natural desert ponds, springs, marshes, and streams).
Reptiles			
Crotalus ruber red diamond rattlesnake	F: None C: SSC State Rank: S3 CVMSHCP: No	Chaparral, woodland, grassland, desert in rocky areas & dense vegetation, Needs burrows, rock cracks, or surface cover objects.	**Absent** (Habitat not present, in the Coachella Valley typically only known from southern edge near toe of slope of Mtns.)
Phrynosoma mcallii Flat-tailed horned lizard	F: ND S: CSC State rank: S2 CVMSHCP: Yes	Fine sand in desert washes and flats with vegetative cover and ants, generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties.	**Absent** (habitat degraded, site is cut off from sand sources, Nearest CNDBB record is approximately 2.5 miles NW of the site)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Uma inornata Coachella Valley fringe-toed Lizard	F: THR C: END State rank: S1 CVMSHCP: Yes	Sandy areas of the Coachella Valley (dunes and sand field habitats)	**Absent** (habitat degraded, site is cut off from sand sources.)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Birds			
Athene cunicularia Burrowing owl	F: BCC C: CSC State rank: S2 CVMSHCP: Yes	Inhabits a variety of open habitats (including edges of ag. fields), often occupies unused ground squirrel burrows	**Very Low** (Project site is disturbed and portions are paved; however southern parcel has potential habitat for species). Nearest CNDBB record (2007) ~ 2.7 mi. NE of site.
Empidonax traillii extimus Southwestern willow flycatcher	F: END C: END State rank: S1 CVMSHCP: Yes	Obligate breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern United States.	**Absent** (Suitable habitat is not present on or near site). Nearest CNDBB (2002) record is >6 mi. NE of site in the Coachella Valley Preserve.
Falco mexicanus Prairie falcon	F: BCC C: WL State rank: S3 CVMSHCP: No	Inhabits a variety of open terrain, nests on cliffs	**Low** (Foraging only, no nesting habitat present)
Lanius ludovicianus Loggerhead shrike	F: BCC C: CSC State rank: S4 CVMSHCP: No	Prefers open fields with scattered trees or shrubs, open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands.	**Low** (Both foraging and nesting habitat present, primarily in more densely planted golf course edges)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Polioptila californica californica California gnatcatcher	F: THR C: SSC State Rank: S2 CVMSHCP: No	Coastal sage scrub and areas of chaparral adjacent to coastal sage scrub below 2500 ft.	**Nesting**: **Absent** (On-site habitat lacking) **Foraging: Absent** (1918 CNDDB record from ~10 mi. NW of site, thought to represent vagrant individual from Banning/Cabazon)
Polioptila melanura Black-tailed gnatcatcher	F: ND S: ND State rank: S3S4 CVMSHCP: No	Nests in wooded desert wash habitat containing mesquite, palo verde, ironwood, and acacia. May also occur in areas with salt cedar, especially when adjacent to native wooded desert wash habitat. Also occurs in desert scrub habitat in winter.	**Low** Mesquite and palo verde occur onsite, however optional habitat (wooded areas in desert wash) is not present on site. Nearest CNDBB (historical, 1919) record is 4.4 miles southeast of site, now developed.
Pyrocephalus rubinus Vermilion flycatcher	F: ND S: CSC State rank: S2S3 CVMSHCP: No	Inhabits cottonwood, willow, mesquite, and other vegetation in desert riparian habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Sporadic breeder in desert oases west and north to Morongo Valley and the Mojave Narrows, San Bernardino County.	**Very Low** (Suitable (desert wash and/or riparian) habitat not present on site, but author has observed this species in association w at least three other golf courses in valley)
Toxostoma crissale Crissal thrasher	F: ND S: CSC State rank: S3 CVMSHCP: Yes	Dense thickets of shrubs or low trees in desert riparian and desert wash habitats. Southeastern California to Texas and northern Mexico.	**Absent** (Suitable habitat not present on site, CNDDB record is from 1932: ~ 4.4 mi. SE of site, now developed as golf course)
Toxostoma lecontei LeConte's thrasher	F: BCC C: CSC (San Joaquin population only) State rank: S3 CVMSHCP: Yes	Resident of open desert wash, scrub, alkali scrub, succulent scrub habitats, nests in dense spiny shrubs and cacti in washes	**Absent** (Habitat too degraded, too close in proximity to golf course and human activitiy, CNDDB records near site all from 1919 -1921)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Mammals			
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	F: ND C: CSC State rank: S3S4 CVMSHCP: No	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodlands, etc. in desert border areas of Southern California into Mexico.	**Absent.** (No suitable habitat present on site for this species; site highly disturbed by human disturbance, CNDDB records are from Thousand Palms Cyn. and Deep Cyn.).
Dipodomys merriami collinus Earthquake Valley Merriam's kangaroo rat	F: ND C: ND State rank: S1S2 CVMSHCP: No	Subspecies of *Dipodomys merriami parvus* (San Bernardino Merriam's kangaroo rat). Known only from San Diego & Riverside Counties; associated with Riversidean sage scrub, chaparral, & non-native grassland habitats.	**Absent.** (No suitable habitat present on site for this species). Nearest CNDBB record is 2.4 miles northeast of site.
Lasiurus xanthinus (*ega*) Western yellow bat	F: ND C: SSC State rank: S3 CVMSHCP: Yes WBWG: H	Found in a variety of habitats: Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Known in palm oasis but believed to be expanding their range with the increased usage of ornamental palms in landscaping.	**Low** - roosting **Low** - foraging (Palms present to provide suitable roosting habitat on site; if present would be expected to forage in project vicinity). CNDBB records (historical, none more recent than 1987) Nearest occurrence ~ 3 mi. SW of site, now developed.
Neotoma lepida intermedia San Diego desert woodrat	F: ND C: CSC State rank: S3 CVMSHCP: No	Often in coastal scrub habitats, but enters desert areas. Usually prefers moderate to dense canopies near rocky areas.	**Absent** (Suitable habitat is not present on site for this species).
Nyctinomops femorosaccus pocketed free-tailed bat	F: None C: SSC State Rank: S3 WBWG: M CVMSHCP: No	Roosts in crevices on rugged cliffs, on high rocky outcrops and slopes. May also roost in buildings, caves, and under roof tiles.	**Roosting: Absent** (Lack of habitat on-site) **Foraging**: **Low** (If roosting nearby)

Species	Protective Status (F=Federal, C=California)	Habitat	Occurrence Probability
Perognathus longimembris bangsi Palm Springs Pocket Mouse	F: ND C: CSC State rank: S2 CVMSHCP: Yes	Most common in creosote-dominated scrub, but also in desert riparian, scrubs, wash, and sagebrush habitats	**Absent** (Habitat is degraded, also correct habitat is largely lacking). Nearest CNDBB record is ~2.75 miles E/NE of the site.
Xerospermophilus tereticaudus chlorus Coachella Valley (Palm Springs) round-tailed ground squirrel	F: None C: SSC State Rank: S1S2 CVMSHCP: Yes	Prefers open, flat, grassy areas in fine-textured, sandy soil in desert succulent scrub, desert wash, desert scrub, alkali scrub, & levees.	**Absent** (Habitat degraded. Not observed during survey, Nearest CNDBB record (1954) is ~ 3.7 mi. NW of site, now developed)

Definitions of status designations and occurrence probabilities.

Federal designations: (federal Endangered Species Act, US Fish and Wildlife Service):
- END: Federally listed, Endangered.
- THR: Federally listed, Threatened.
- BCC: Birds of Conservation Concern
- C: Candidate for Federal listing
- ND: Not designated.
- BCC: Bird of Conservation Concern.

State designations: (California Endangered Species Act, California Dept. of Fish and Game)
- END: State listed, Endangered.
- THR: State listed, Threatened.
- RARE: State listed as Rare (Listed "Rare" animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- CSC: California Special Concern Species.
- WL: Watch List Species.
- ND: Not designated.

CVMSHCP designations
Yes: Conserved by the CVMSHCP
No: Not Specifically Conserved by the CVMSHCP
C: Considered, but not included in the CVMSHCP

California Native Plant Society (CNPS) designations: (Non-regulatory, compilation by a non-profit organization which tracks rare plants)
CNPS California Rare Plant Ranks (CRPR) Note: According to the CNPS (http://www.cnps.org/programs/Rare_Plant/inventory/names.htm), ALL plants on Lists 1A, 1B, 2A, and 2B meet definitions for state listing as threatened or endangered under Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code. Certain plants on Lists 3 and 4 do as well.
The CDFW (http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml) states that plants on Lists 1A, 1B, 2A, and 2B of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects (CEQA Guidelines Section 15380). However, a plant need not be in the Inventory to be considered a rare, threatened, or endangered species under CEQA. In addition, CDFW recommends, and local governments may require, protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.
List 1A: Plants presumed extinct in California.
List 1B: Plants rare and endangered in California and throughout their range.

List 2A: Plants presumed extirpated in California, but more common elsewhere.
List 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
List 3: Plants for which more information is needed.
List 4: Plants of limited distribution; a "watch list."
CA Endemic: Taxa that occur only in California
CNPS Threat Code:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)
Note: All List 1A (presumed extinct in California) and some List 3 (need more information- a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.

Definitions of occurrence probability:

Occurs: Observed on the site by AMEC personnel, or recorded on-site by other qualified biologists.

High: Observed in similar habitat in region by qualified biologists, or habitat on the site is a type often utilized by the species and the site is within the known range of the species.

Moderate: Reported sightings in surrounding region, or site is within the known range of the species and habitat on the site is a type occasionally used by the species.

Low: Site is within the known range of the species but habitat on the site is rarely used by the species.

Absent: A focused study failed to detect the species, or, no suitable habitat is present.

CDFW CNDDB rankings: Animals
S1 = Extremely endangered: <6 viable occurrences or <1,000 individuals, or < 2,000 acres of occupied habitat
S2 = Endangered: about 6-20 viable occurrences or 1,000 - 3,000 individuals, or 2,000 to 10,000 acres of occupied habitat
S3 = Restricted range, rare: about 21-100 viable occurrences, or 3,000 – 10,000 individuals, or 10,000 – 50,000 acres of occupied habitat
S4 = Apparently secure; some factors exist to cause some concern such as narrow habitat or continuing threats
S5 = Demonstrably secure; commonly found throughout its historic range
SH = all sites are historical, this species may be extinct, further field work is needed

CDFW CNDDB rankings: Plants and Vegetation Communities
S1 = Less than 6 viable occurrences OR less than 1,000 individuals OR less than 2,000 acres
S1.1 = very threatened
S1.2 = threatened
S1.3 = no current threats known
S2 = 6-20 viable occurrences OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 = very threatened
S2.2 = threatened
S2.3 = no current threats known
S3 = 21-80 viable occurrences or 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 = very threatened
S3.2 = threatened
S3.3 = no current threats known
S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.
S5 = Demonstrably secure to ineradicable in California.

Western Bat Working Group (WBWG) designations:
The Western Bat Working Group is comprised of agencies, organizations and individuals interested in bat research, management and conservation from the 13 western states and provinces. Its goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance and encourage education programs.
H: High: Species which are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.

M: Medium: Species which warrant a medium level of concern and need closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
L: Low: Species for which most of the existing data support stable populations, and for which the potential for major changes in status in the near future is considered unlikely. There may be localized concerns, but the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on High and Medium status species.
P: Periphery: This designation indicates a species on the edge of its range, for which no other designation has been determined.

Table 1 lists eighteen sensitive plants known from the general project vicinity, thirteen of which are not expected to occur on the project site due to lack of habitat, incorrect elevational range, and/or unsuitable microhabitat characteristics. The remaining five plants: Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*), glandular ditaxis (*Ditaxis claryana*), Abrams' spurge (*Euphorbia abramsiana*), flat-seeded spurge (*Euphorbia platysperma*), and slender cottonheads (*Nemacaulis denudata* var*. gracilis*) are all expected to have from "Very low' to "Low" occurrence probabilities, due to the degraded nature of the site and the overall rarity of the species.

Table 2 lists one sensitive habitat which is not present on the site.

Table 3 lists four species of sensitive insects that are known from the general project vicinity, none of which are expected to occur on site due to lack of habitat, on-site habitat that is too degraded and isolated, or the site is not within the currently known range of the species.

None of the three sensitive reptile species listed in Table 3 are expected to occur on the project site. These include the flat-tailed horned lizard (*Phrynosoma mcallii*), Coachella Valley fringe-toed lizard (*Uma inornata*), and red diamond rattlesnake (*Crotalus ruber*). The remnant, sandy soils present on APN 620-420-023 are disturbed, somewhat compacted, and show evidence of having been leveled and irrigated in the past. The red diamond rattlesnake usually does not occur this far out onto the valley floor, and requires rocky areas to live in. The Coachella Valley fringe-toed lizard and flat-tailed horned lizard are "covered species" under the CVMSHCP, and potential impacts to these reptiles can be mitigated through payment of the CVMSHCP fee.

Five of the nine sensitive bird species listed in Table 3 are believed to have from "Very Low" to "Low" occurrence potentials on the project site. The remaining four species: southwestern willow flycatcher (*Empidonax traillii extimus*), California gnatcatcher (*Polioptila californica californica*), crissale thrasher (*Toxostoma crissale*), and Le Conte's thrasher (*Toxostoma lecontei*) are not expected on the site due to lack of habitat (and in the case of the gnatcatcher the site is not in its range). Prairie falcon (*Falco mexicanus*) could rarely forage over the site, but there isn't any cliff habitat for falcon nesting. Loggerhead shrike (*Lanius ludovicianus*) would have a low potential for nesting but could forage over portions of the project area. Black-tailed gnatcatcher (*Polioptila melanura*) would have a low potential to forage on the mesquite and palo verde present on portions of the site and would have a low potential for nesting due to disturbance from the adjoining golf course activities. Vermilion flycatcher (*Pyrocephalus rubinus*) is expected to have a "Very Low" probability of occurrence, but cannot be entirely ruled out, as the author has observed this species in association with at least three golf courses in the valley. There is potential habitat for the burrowing owl (*Athene cunicularia*) on the undeveloped portion of APN 620-420-023, although no sign of this species was noted during the survey. None of these five bird species are listed as threatened or endangered by the federal or state wildlife agencies.

Of the seven mammals listed in Table 3 only two are expected to have potential to occur on the project site. Two bat species, the pocketed free-tailed bat (*Nyctinomops femorosaccus*) and western yellow bat (*Lasiurus xanthinus*), have a low potential to forage over, and in the case of the yellow bat only, roost on the site. Western yellow bat commonly roosts in palm skirts, and several landscaped palms are present on and adjacent to the project site. One of these bat species (western yellow bat) is covered under the CVMSHCP; but does not have any formal federal or state listing as threatened or endangered. It is considered a "High Priority" species by the Western Bat Working Group. The pocketed free-tailed bat is not expected to roost on the site due to the lack of roosting habitat in the form of crevices on rugged cliffs, and on high rocky outcrops and slopes. This species is considered a "Medium Priority" species by the Western Bat Working Group and does not have any formal federal or state listing as threatened or endangered.

In summary, no sensitive species were observed or detected on the project site during the surveys. The following seven sensitive wildlife species have a very low or low potential to occur within the project site:

- prairie falcon – low potential to forage over the site, cliff nesting habitat not present.
- loggerhead shrike – low potential to forage or nest on the site.
- black-tailed gnatcatcher – low potential to forage or nest on the site.
- burrowing owl – low potential to occur on the southern parcel.
- vermilion flycatcher – very low potential for foraging, has been observed on other golf courses in the valley
- pocketed free-tailed bat – low potential for foraging over site, but no potential to roost within project site.
- Western yellow bat - foraging habitat over site, low potential to roost within project site.

4.0 DISCUSSION

4.1 Potential Impacts of the Proposed Project

The proposed project site has been previously altered and/or degraded through a variety of human activities. Therefore, the quality of native habitat on the site is very low on the southern parcel APN 620-420-023. The other two parcels, 620-042-024, and 620-040-008 have been almost entirely developed as asphalt parking lots. Considering the current level of disturbance, including the daily disturbance of human activities on the surrounding Desert Willow Golf Resort, the developed nature of the surrounding lands, and the low probability for the majority of the sensitive species known to occur in the project area to be present on-site, there is a low potential for the proposed project to adversely impact most of the sensitive biological resources known from the project vicinity.

A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat. Corridors are critical for allowing for the movement of animals and the continuation of viable populations. The purpose of wildlife corridors is to provide safe passage for wildlife to move safely from one habitat area to another. The project site represents an “island” of heavily degraded habitat surrounded by development and is not suitable to function as a wildlife corridor.

4.2 Conservation Areas

A review of the CVMSHCP confirmed that the Desert Willow Golf Resort Project site is not located within any CVMSHCP designated Conservation Area. The Thousand Palms Conservation Area is located approximately 2 miles northeast of the project site, and the Santa Rosa/San Jacinto Mountains Conservation Area is located approximately 3 miles southwest of the project site.

4.3 Suggested Mitigation Measures

Excluded from coverage under the CVMSHCP are a variety of common bird species that are protected by the MBTA. This includes virtually all native migratory and resident bird species, including many of the birds already known to occur in the vicinity (see Appendix 1). Avoidance of impacts to nesting migratory and resident birds is a requirement of the federal permit issued for the CVMSHCP. In order to avoid impacting nesting birds, avoidance of project-related disturbance during the nesting season would be required (generally from approximately February 1 to August 31). Alternatively, nesting bird surveys conducted by a qualified biologist immediately prior to project related disturbance during the nesting season would be required. If nesting birds are present, no work would be permitted near the nest until young have fledged. While there is no established protocol for nest avoidance, when consulted, the CDFW generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 – 300 feet for songbirds.

A focused burrowing owl survey was not performed as part of this survey effort. Due to the presence of potentially suitable habitat on the southern parcel, there is a low probability that the project could impact burrowing owls. Mr. Moorhatch has contacted Karen A. Riesz of the California Department of Fish and Wildlife to obtain guidance on survey requirements for burrowing owl as related to other projects in the Coachella Valley (Riesz pers. comm 2015). Ms. Riesz stated: “According to the Coachella Valley MSHCP Section 9, Burrowing Owl, page 9-143: For projects subject to CEQA, surveys for the presence of burrowing owls in the Conservation Areas, using an accepted protocol, are required. If your project is **not** in a

Conservation Area, you are not required to conduct protocol surveys. That said, you are still required by law (DFG codes and MBTA) to avoid take of burrowing owls." This can be accomplished by take avoidance (pre-construction) surveys. CDFW recommends two take avoidance surveys. The first should occur between 14 and 30 days prior to ground disturbance and the second within 24 hours of ground disturbance." If owls are located on the project site, conducting the first clearance survey 14 to 30 days prior to ground disturbance enables the project proponent to consult with CDFW to determine what course of action is needed, such as the use of exclusion devices (if applicable) to discourage owls from using burrows that are believed to be in jeopardy of being impacted by implementation of the project.

CVMSHCP Conservation Areas
Desert Willow Golf Course

FIGURE
4

4.4 Conclusions

A Habitat Assessment and CVMSHCP Consistency Analysis was conducted for the Desert Willow Golf Resort Project. The project study area included the project site, Assessor's Parcel Numbers (APN) 620-042-023, 620-042-024, and 620-040-008, located in the city of Palm Desert, Riverside County, California. (Figure 1) and surrounding areas potentially needed to complete the project. Payment of the required CVMSHCP development fee will mitigate any impacts to species covered under the plan.

Wood E&I recommends conducting two take avoidance (pre-construction) surveys for burrowing owl. The first between 14 and 30 days prior to ground disturbance and the second within 24 hours of ground disturbance.

To comply with the MBTA, any vegetation or tree removal, or grading or other site disturbance occurring between February 1 to August 31 and having the potential to impact nesting birds shall require a qualified biologist to conduct at least one nesting bird survey, and more if deemed necessary by the consulting biologist. If there are no nests present, this condition will be cleared. Conducting construction activities outside the breeding season (September 1 through January 31) can avoid having to implement these measures.

The survey area does not contain any CVMSHCP designated wildlife movement corridors or linkages and is not located within any CVMSHCP designated Conservation Area. Additionally, the project site does not lie within any designated critical habitat for any endangered or threatened species.

The project site does not have any riparian/riverine areas or jurisdictional water features present on-site. A jurisdictional delineation is not required to access the impacts to drainage features within the project site. No additional surveys, consultation, or permits are required.

With the implementation of the recommendations, requirements and guidelines summarized above, including requisite participation in the CVMSHCP, project related impacts to CVMSHCP-covered species, special-status species not covered by the CVMSHCP, and nesting birds protected under the MBTA are expected to be mitigated to less than significant levels. The subject property can then be developed consistent with the MSHCP.

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APPENDIX 1

PLANTS AND VERTEBRATE ANIMALS OBSERVED ON THE DESERT WILLOW GOLF RESORT DEVELOPMENT PROJECT SITE

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Plants Observed or Detected on the Desert Willow Golf Resort Development Project Site, Riverside County, California
July 18, 2018

ANGIOSPERMAE **DICOTYLEDONEAE**	**DICOT FLOWERING PLANTS**
Acanthaceae	**Acanthus Family**
Justicia californica	chuparosa (planted)
Anacardiaceae	**Sumac Family**
**Schinus molle*	Peruvian pepper
Apocynaceae	**Dogbane Family**
Funastrum hirtellum	trailing townula
**Nerium oleander*	oleander
Asteraceae	**Sunflower Family**
Baccharis sarothroides	broom baccharis
Dicoria canescens	desert twinbugs
Encelia farinosa	brittlebush (dominant)
Erigeron canadensis	horseweed
Bignoniaceae	**Trumpet-creeper Family**
Chilopsis linearis ssp. *arcuata*	desert-willow
Boraginaceae	**Borage Family**
Tiquilia plicata	fanleaf crinklemat
Euphorbiaceae	**Spurge Family**
Croton californicus	California croton
Fabaceae	**Pea Family**
**Acacia* sp.	unid'd Australian acacia #1 (planted)
**Acacia* sp.	unid'd Australian acacia #2 (planted)
**Acacia stenophylla*	shoestring acacia (planted)
**Dalbergia sissoo*	Indian rosewood (planted)
**Ebenopsis confinis*	ejoton (planted)
Parkinsonia florida	blue palo verde
Prosopis glandulosa var. *torreyana*	honey mesquite
Psorothamnus emoryi	Emory indigo-bush
Solanaceae	**Nightshade Family**
**Nicotiana glauca*	tree tobacco
Tamaricaceae	**Tamarisk Family**
**Tamarix ramosissima*	saltcedar
Zygophyllaceae	**Caltrop Family**

Plants Observed or Detected on the Desert Willow Golf Resort Development Project Site, Riverside County, California
July 18, 2018
(Continued)

Larrea tridentata	creosote bush
MONOCOTYLEDONEAE	**MONOCOT FLOWERING PLANTS**
Arecaceae	**Palm Family**
Washingtonia filifera	California fan palm (planted)

* - denotes a non-native species

Vertebrates Observed or Detected on the Desert Willow Golf Resort Development Project Site, Riverside County, California

July 18, 2018

ARTHROPODS	**ARTHROPODA**
INSECTS	**INSECTA**
Dragonflies and Damselflies	**Odonata**
common green darner	*Anax junius*
flame skimmer	*Libellula saturate*
roseate skimmer	*Orthemis ferruginea*
blue dasher	*Pachydiplax longipennis*
wandering glider	*Pantala flavescens*
Mexican amberwing	*Perithemis intense*
black saddlebags	*Tramea lacerata*
red saddlebags	*Tramea onusta*
CHORDATES	**CHORDATA**
REPTILES	**REPTILIA**
SQUAMATA	**LIZARDS & SNAKES**
Iguanids	**Iguanidae**
desert iguana	*Dipsosaurus dorsalis*
BIRDS	**AVES**
New World Quail	**Odontophoridae**
Gambel's quail	*Callipepla gambelii*
Pigeons and Doves	**Columbidae**
*Eurasian collared-dove	*Streptopelia decaocto*
mourning dove	*Zenaida macroura*
Cuckoos, Roadrunners, and Allies	**Cuculidae**
greater roadrunner	*Geococcyx californianus*
Nightjars	**Caprimulgidae**
lesser nighthawk	*Chordeiles acutipennis*
Hummingbirds	**Trochilidae**
black-chinned hummingbird	*Archilochus alexandri*
Costa's hummingbird	*Calypte costae*

Barn Owls barn owl (dead)	**Tytonidae** *Tyto alba*
Tyrant Flycatchers western kingbird	**Tyrannidae** *Tyrannus verticalis*
Jays, Magpies, and Crows common raven	**Corvidae** *Corvus corax*
Penduline Tits and Verdin verdin	**Remizidae** *Auriparus flaviceps*
Wrens Bewick's wren	**Troglodytidae** *Thryomanes bewickii*

APPENDIX 2

SITE PHOTOS

Desert Willow Golf Resort Project
Palm Desert, Riverside County, California

Photo 1. View along eastern edge of APN 620-420-023 looking southwest, showing some of the habitat present.

Photo 2. Southern end of APN 620-420-023 facing north. Brittlebush scrub-dominated habitat evident.

Photo 3. Southern/southwestern edge of APN 620-420-023 showing old pvc irrigation pipes laying on surface.

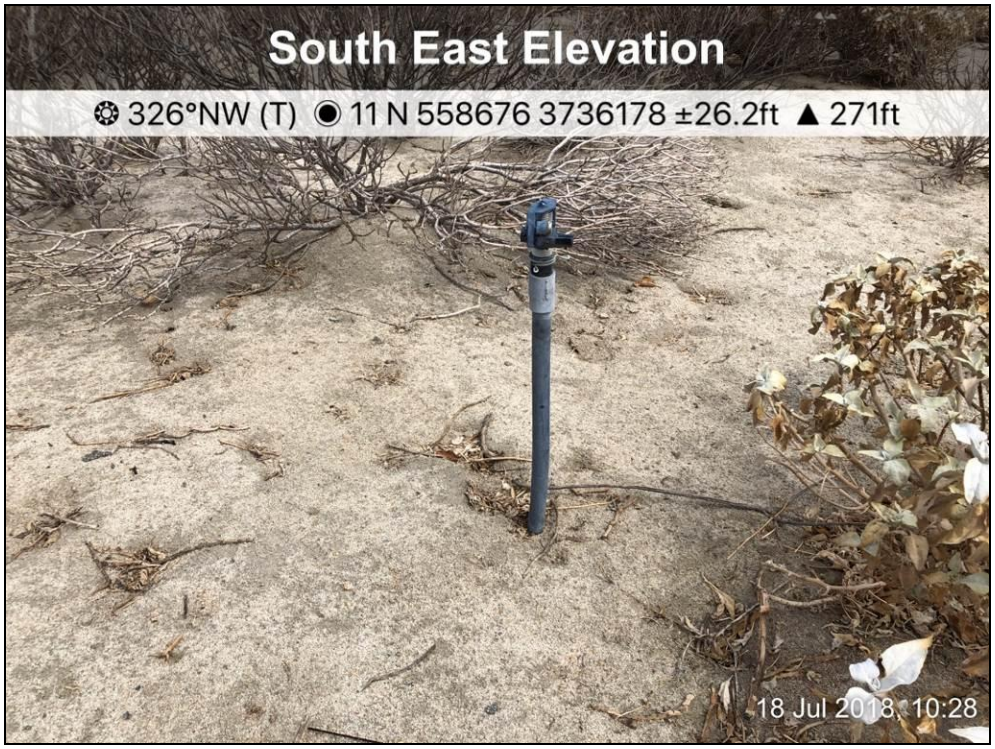

Photo 4. Rainbird sprinkler observed on APN 620-420-023.

Photo 5. Dirt road present on southern edge of APN 620-420-023.

Photo 6. Cleared area present on the western area of APN 620-420-023.

Photo 7. Land use adjacent to the western portion of APN 620-420-023.

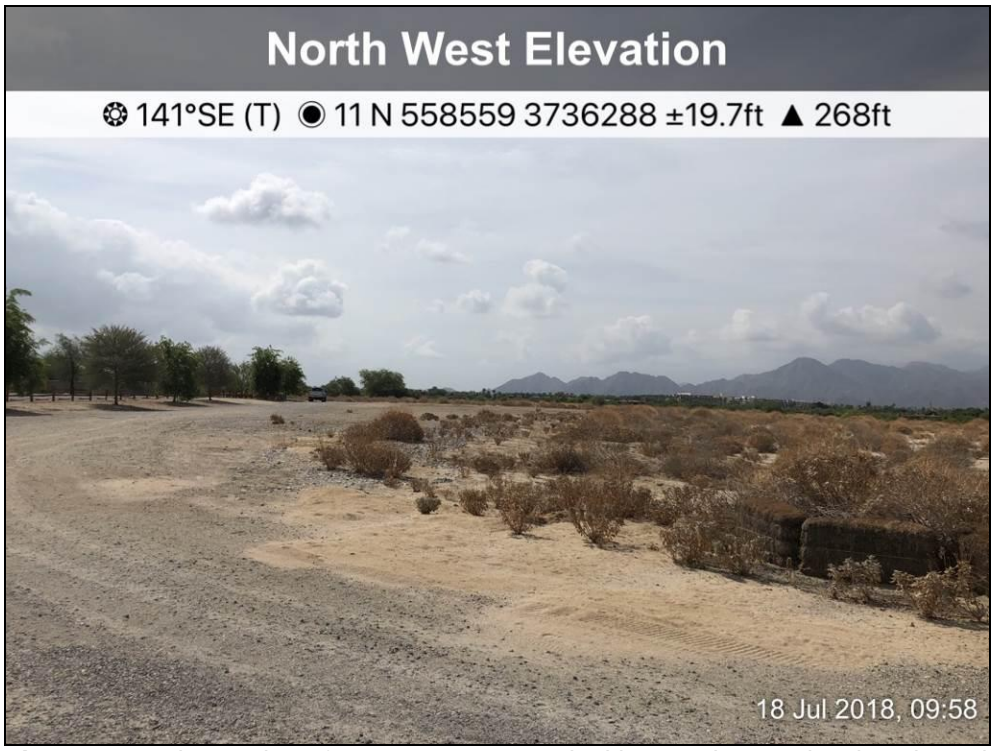

Photo 8. Northern edge of APN 620-420-023, looking southeast, showing cleared dirt road area.

Photo 9. Western edge of APN 620-400-008, showing densely landscaped edge of parking lot.

Photo 10. Eastern end of APN 620-400-008, facing northwest. Fully developed as a parking lot.

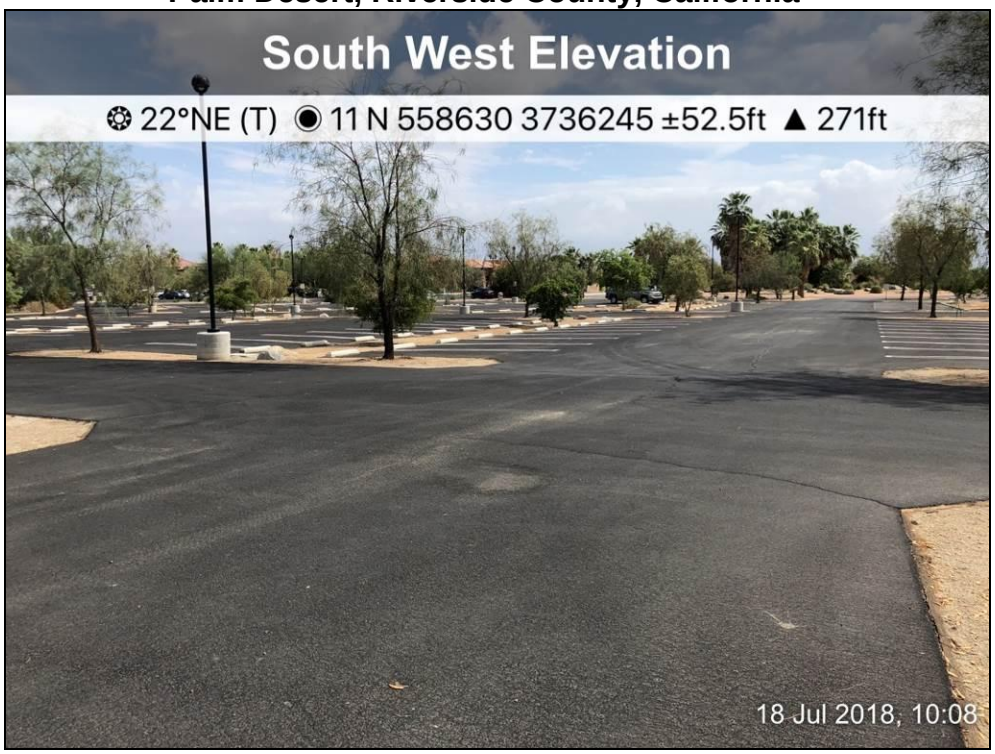

Photo 11. Southern portion of APN 620-420-024, facing north/northeast. Fully developed as a parking lot.

Photo 12. Existing golf course development bordering the east side of APN 620-420-023.