

**Focused Survey for Agassiz's Desert Tortoise,
Habitat Evaluation for Burrowing Owl, and
General Biological Resource Assessment for an
8-acre± Site (APN 0601-201-40) in the Town of Yucca Valley
San Bernardino County, California**

(U.S. Geological Survey 7.5' Joshua Tree North quadrangle, Township 1 North, Range 6
West, a portion of the Northeast ¼ of Section 32, S.B.B.&M.)

Job#: 23-001

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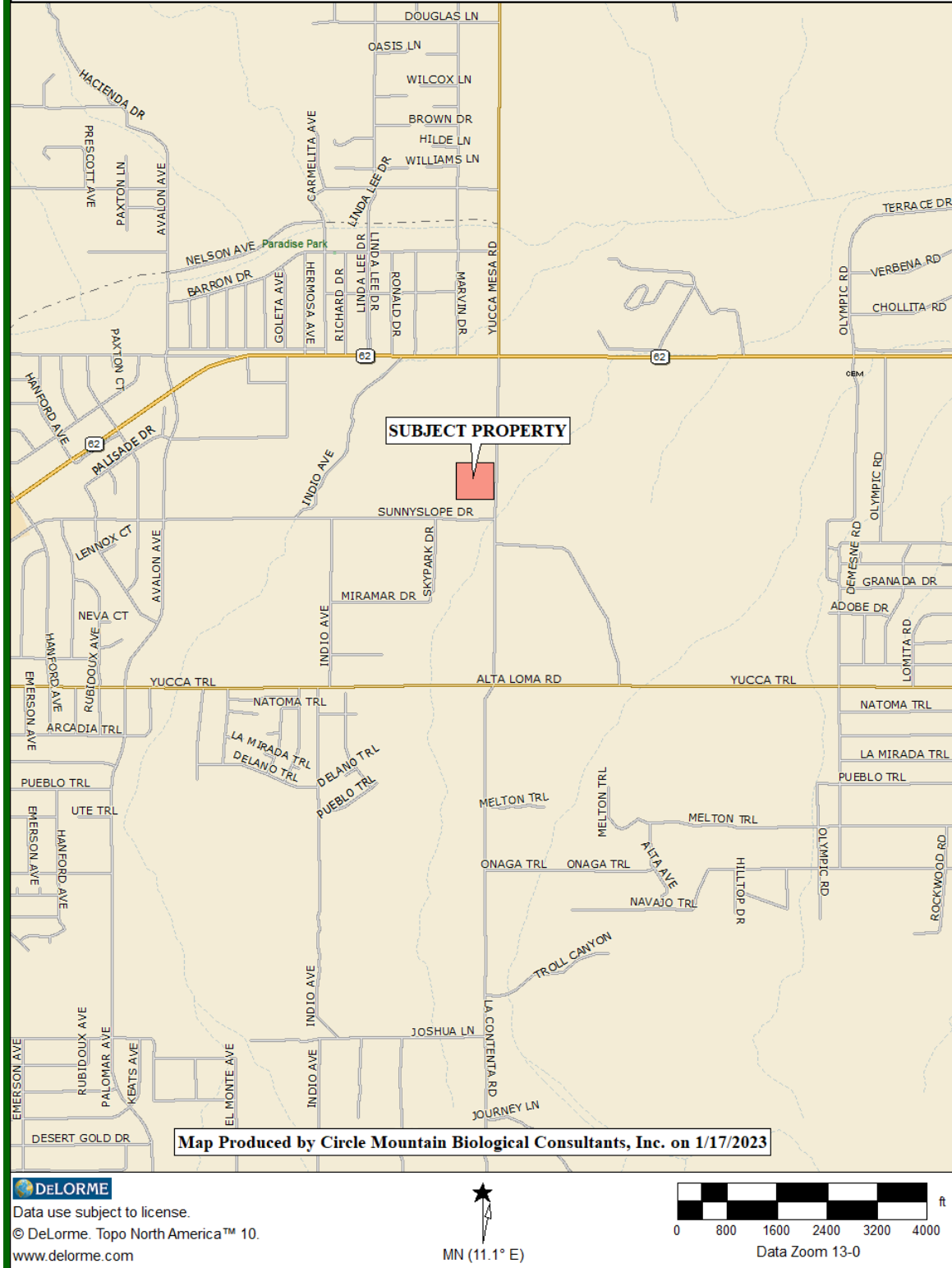
I hereby certify that the statements furnished herein, including attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.



Circle Mountain Biological Consultants, Inc.
Author and Field Investigator: Edward L. LaRue, Jr.

January 2023

Figure 1. APN 0601-201-40: Vicinity Map



Map Produced by Circle Mountain Biological Consultants, Inc. on 1/17/2023



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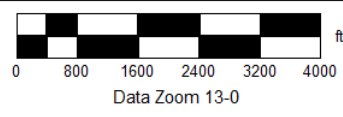
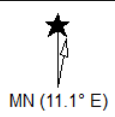


Figure 2. APN 0601-201-40: Site Map with Joshua Tree and Transect Locations

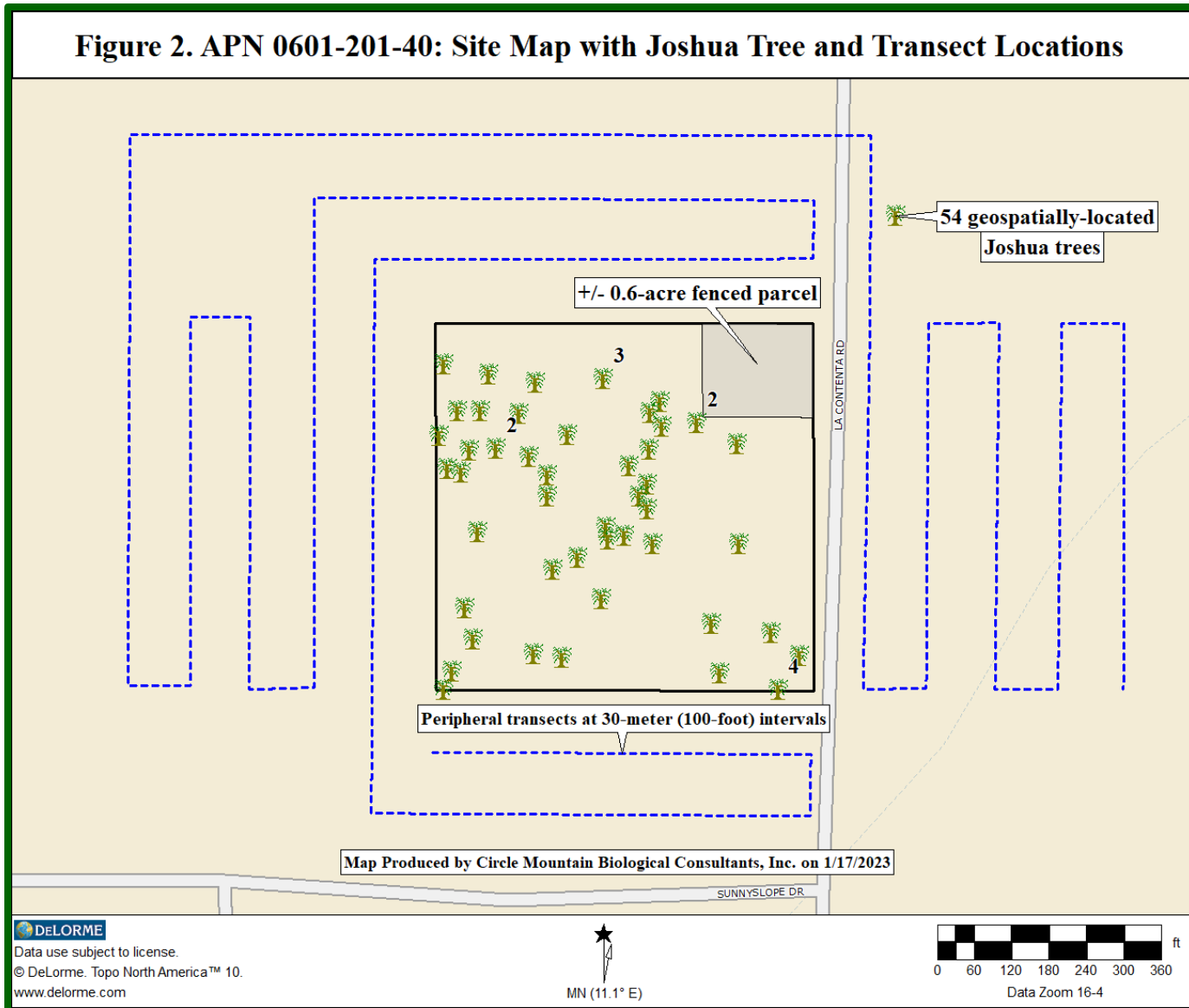
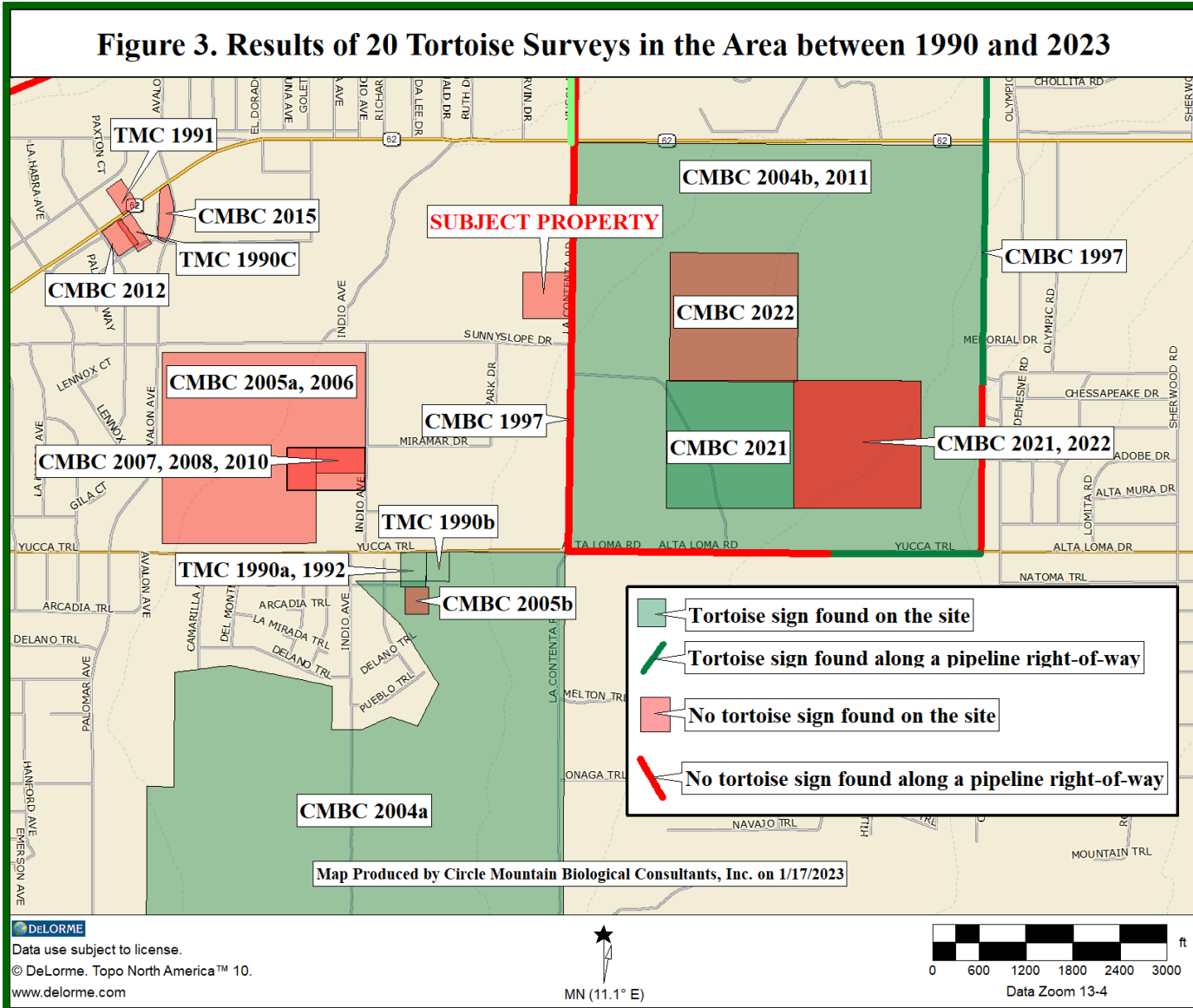
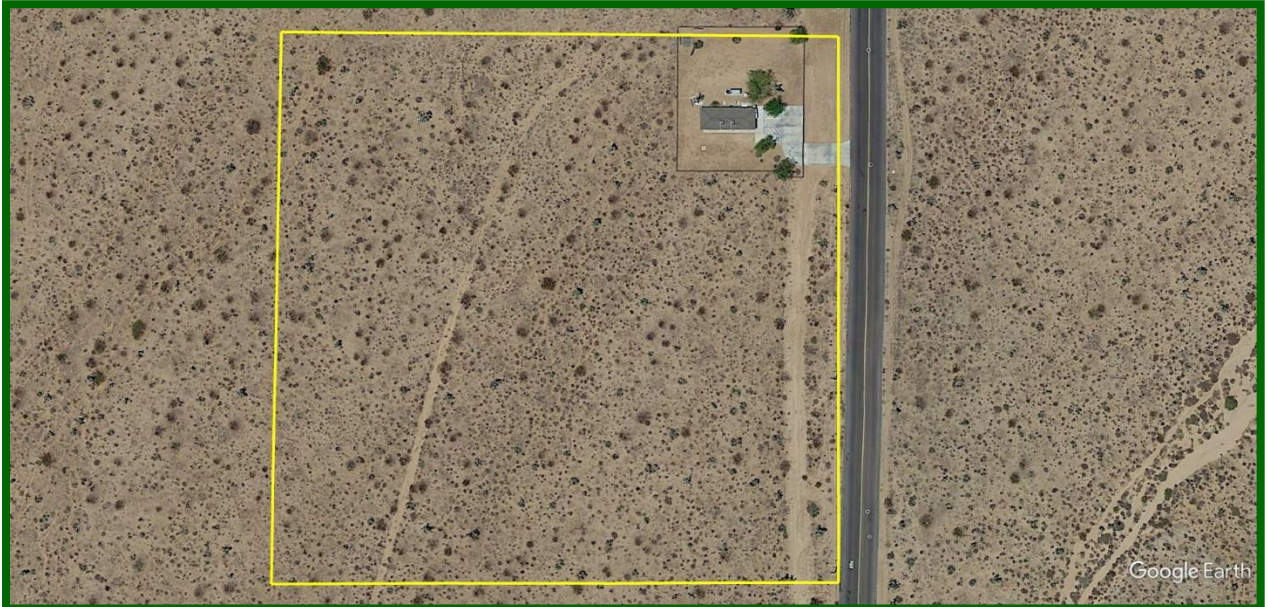


Figure 3. Results of 20 Tortoise Surveys in the Area between 1990 and 2023



**Figure 4. Tentative APN 0601-201-40:
Aerial Photograph (©2023 Google Earth)**



Enlarged aerial view from approximately 4,400 feet altitude (Image date: 6/11/2021)



Regional aerial view from approximately 13,800 feet altitude.

Executive Summary

Circle Mountain Biological Consultants, Inc. (CMBC) was contracted to Lakeshore Construction (Proponent) to perform a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessment for burrowing owl (*Athene cunicularia*), and a general biological resource assessment on an 8-acre± site located in the Town of Yucca Valley, San Bernardino County, California (see Figures 1 and 2). APN 0601-201-40 is an 8-acre± site located approximately 1,600 feet south of Highway 62, 300 feet north of Sunnyslope Drive, with La Contenta Road to the east, and open desert to the west. The legal description for the subject property is Township 1 North, Range 6 West, a portion of Section 32, S.B.B.&M.

For a total of 4.0 hours, between 1200 and 1600 on 9 January 2023, Ed LaRue of CMBC surveyed the site and adjacent areas as described herein. This entailed a survey of 19 transects, spaced at 10-meter (30-foot) intervals and oriented along an east-west axis throughout the 8-acre± parcel. As depicted in Figure 2, peripheral transects were surveyed for detection of burrowing owls at 30-meter (100-foot) intervals on all sides out to 150 meters, except for the west, south, and north where existing develop precluded surveys.

Based on DeLorme Topo USA® 10.0 software, elevations on the subject property range from approximately 980 meters (3,220 feet) at the southwest corner down to 975 meters (3,195 feet) at the northeast corner. Terrain is relatively flat, with a slight northern aspect, and soils are comprised of relatively sandy loam. The 45 plant species identified onsite and nine species identified in adjacent areas during the survey are listed in Appendix A. The site is comprised of Mojavean creosote bush scrub and Joshua tree woodland. The six bird and seven mammal species identified during the survey are listed in Appendix B.

Based on the absence of tortoise sign on-site and in adjacent areas, and available information reviewed for this habitat assessment, CMBC concludes that tortoises are absent from the subject property. As such, no impacts are anticipated, and no mitigation measures are recommended.

Based on the field survey and habitat assessment, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: Burrowing owl, Cooper's hawk, northern harrier, or prairie falcon. As such, no adverse impacts have been identified and no mitigation measures are recommended.

Those species for which suitable habitats are present include LeConte's thrasher, loggerhead shrike, and Little San Bernardino Mountains linanthus. As reported herein, the Town will require a preconstruction survey, so during that survey it will be important to look for nesting birds, as described herein, including thrasher and shrike nests. If found, avoidance measures can be implemented and significant impacts avoided. If linanthus occurs onsite, which would need to be determined during focused surveys in March and April following favorable winter rainfall, the loss of eight acres from the region is not considered to be a significant impact.

Joshua tree, Mojave yucca, silver cholla, pencil cholla, beavertail cactus, and hedgehog cactus are species found on-site that may be subject to pertinent development codes.

Table of Contents

Figure 1. APN 0601-201-40: Vicinity Map	i
Figure 2. APN 0601-201-40: Site Map with Transect Locations.....	ii
Figure 3. Results of 20 Tortoise Surveys in the Area between 1990 and 2023	iii
Figure 4. APN 0601-201-40: Aerial Photograph (©2023 Google™ Earth)	iv
Executive Summary	v
1.0. Introduction	1
1.1. Purpose and Need for Study	1
1.2. Project Description.....	1
2.0. Methods.....	1
2.1. Literature Review.....	1
2.2. Field Survey.....	2
3.0. Results.....	4
3.1. Common Biological Resources.....	4
3.1.1. Common Flora.....	4
3.1.2. Common Fauna	4
3.2. Uncommon Biological Resources.....	5
3.2.1. Agassiz’s Desert Tortoise	5
3.2.2. Other Special Status Species	6
3.3. Other Protected Biological Resources.....	7
3.3.1. Stream Courses.....	7
3.3.2. Protected Plant Species.....	8
4.0. Conclusions and Recommendations	9
4.1. Impacts to Agassiz’s Desert Tortoise and Proposed Mitigation.....	9
4.2. Impacts to Other Biological Resources and Proposed Mitigation	10
5.0. Literature References	12
Appendix A. Plant Species Detected	18
Appendix B. Animal Species Detected	21
Appendix C. Field data sheets completed on 9 January 2023	22
Appendix D. Photographic Exhibits (see Figure 5 for exhibit locations)	24
Appendix E. Tabulated Data for Joshua Trees	28

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1.0. Introduction

1.1. Purpose and Need for Study. Circle Mountain Biological Consultants, Inc. (CMBC) was contracted by Lakeshore Construction (Proponent) to perform a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessment for burrowing owl (*Athene cunicularia*), and a general biological resource assessment on an 8-acre± site located in the Town of Yucca Valley, San Bernardino County, California (see Figures 1 and 2). Given the location of the site within San Bernardino County and because the Town does not have specified guidelines for report preparation, this report has been prepared, in part, according to County of San Bernardino's *Report Protocol for Biological Assessment Reports* (County of San Bernardino 2006).

As the California Environmental Quality Act (CEQA) Lead Agency, the Town of Yucca Valley Planning Department (Town) is required to complete an initial study to determine if site development will result in any adverse impacts to rare biological resources. The information may also be useful to federal and State regulatory agencies, including U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), respectively, if the Lead Agency asks them to assess impacts associated with proposed development. Results of CMBC's focused tortoise survey, burrowing owl habitat assessment, and general biological resource assessment are intended to provide sufficient baseline information to these agencies to determine if significant impacts will occur and to identify mitigation measures, if any, to offset those impacts.

1.2. Project Description. APN 0601-201-40 is an 8-acre± site located approximately 1,600 feet south of Highway 62, 300 feet north of Sunnyslope Drive, with La Contenta Road to the east, and open desert to the west. The legal description for the subject property is Township 1 North, Range 6 West, a portion of Section 32, S.B.B.&M.

2.0. Methods

2.1. Literature Review. CMBC consulted materials included in our library to determine the nearest locations of special status plant and animal species that have been reported from the vicinity of the subject property. Between 1989 (Tierra Madre Consultants, Inc. 1989) and the present 2023 study, CMBC has completed approximately 298 focused tortoise surveys in the Morongo Basin area, which comprises the region including Morongo Valley to the west and Twentynine Palms to the east. Of relevance given their proximity to the subject property are 19 focused tortoise surveys located between immediately east of the site (CMBC 2004b, 2011) and 1.1 mile west of the parcel (TMC 1991), between 1990 (TMC 1990a, b, c) and 2022 (CMBC 2022), which, along with the subject property, are mapped in Figure 3. These and other materials used in the completion of this report are listed in Section 5.0, below.

2.2. Field Survey.

2.2.1. *Survey and Habitat Assessment Protocols.* A significant paper was published in June 2011 (Murphy et al. 2011) whereby the “desert tortoise” of the Mojave Desert was split into two species, including *Gopherus agassizii*, referred to as “Agassiz’s desert tortoise,” and a newly described species, *G. morafkai*, referred to as “Morafka’s desert tortoise,” which occurs in the Sonoran Desert. According to Murphy et al. (2011), “...this action reduces the distribution of *G. agassizii* to only 30% of its former range. This reduction has important implications for the conservation and protection of *G. agassizii*, which may deserve a higher level of protection.” Then in 2016 (Edwards et al. 2016), a third species of tortoise was described, referred to as the “Goode’s Thornscrub Tortoise” (*Gopherus evgoodei*), which further reduced the perceived range of Morafka’s desert tortoise. Agassiz’s desert tortoise is the threatened species that occurs in the region surrounding the subject property.

For **Agassiz’s desert tortoise**, CMBC followed the presence-absence survey protocol first developed by the USFWS in 1992 and revised in 2019. USFWS (2019) protocol recommends surveying transects at 10-meter (30-foot) intervals throughout all portions of a given parcel and its associated action area. The *action area* is defined by regulation as all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action (50 CFR §402.02). For this site, the action area is the same as the subject property. Since the site is smaller than 500 acres, it may be surveyed year-round but there is no opportunity to estimate the density of tortoises on the 8-acre± subject property (USFWS 2019), particularly for this site where no tortoise sign was found.

For **burrowing owl**, although the formal habitat assessment does not specify a given interval to survey a site (Appendix C in CDFG 2012), subsequent breeding and nonbreeding studies identify that transects are surveyed at 7 to 20 meters (23 to 65 feet) apart, with five additional transects surveyed at 30-meter intervals out to 150 meters (500 feet) in adjacent areas in potential habitat (i.e., excluding areas substantially developed for commercial, residential, and/or industrial purposes) (Appendix D in CDFG 2012). With its narrower transect intervals, the tortoise survey is sufficient to cover the site for burrowing owl. The focus of the survey is to find and inspect all burrows sufficiently large to be used by burrowing owls. Importantly, this methodology is considered a formal *habitat assessment* for presence of burrowing owls, which can be conducted any time of the year. Had burrowing owl sign been found, which it was not, it would have then been necessary to perform breeding burrowing owl surveys during the spring and summer as outlined in CDFG (2012).

For **Joshua tree**, in October 2020, the California Fish and Game Commission accepted as complete a petition to list Joshua tree as a California Endangered Species. The Commission had a year to consider the petition and publish its determination, which was expected in October 2021. A determination is expected in April 2023. To provide data requested in a December 2020 letter from San Bernardino County to a client in the community of Joshua Tree, CA, LaRue recorded locations of 54 Joshua trees using a Garmin GPS unit, which has a horizontal accuracy of 2 to 3 meters. Additional information taken for each tree

included number of trunks, height(s), range of heights from the shortest to tallest trunks, and a general health assessment of poor, moderate, or good based on the color of leaves (i.e., spikes), necrosis on the leaves, posture (i.e., erect versus leaning), dead versus live branches on each tree, and adherence of bark to the trunk(s). The tabulated information for each Joshua tree is included in Appendix E.

2.2.2. *Field Survey Methods.* For a total of 4.0 hours, between 1200 and 1600 on 9 January 2023, Ed LaRue of CMBC surveyed the site and adjacent areas as described herein. This entailed a survey of 19 transects, spaced at 10-meter (30-foot) intervals and oriented along an east-west axis throughout the 8-acre± parcel. As depicted in Figure 2, peripheral transects were surveyed for detection of burrowing owls at 30-meter (100-foot) intervals on all sides out to 150 meters, except for the west, south, and north where existing develop precluded surveys. Copies of CMBC’s data sheet completed in the field and USFWS’ (2019) pre-project survey data sheet are included in this report (see Appendix C).

As the site was surveyed, LaRue kept tallies of observable human disturbances encountered on the 19 transects he surveyed. The results of this method provide *encounter rates* for observable human disturbances. For example, two roads observed on each of 10 transects yields a tally of 20 roads (i.e., two roads encountered 10 times). Habitat quality, adjacent land uses, and this disturbance information are discussed below in Section 3.2 relative to the potential occurrence of Agassiz’s desert tortoise and other special status species on and adjacent to the subject property.

Weather conditions recorded at the beginning and ending of the survey included temperatures measured approximately 5 centimeters (2 inches) above the ground, percent cloud cover, and wind speeds measured by a hand-held Kestrel® weather and wind speed meter, as reported in Table 1.

Date 2023	Begin to End = Total hours	Weather Conditions	
		Beginning	Ending
1/9	1200 to 1600 = 4.0 hrs	57°F, 13 ↑ 17 mph, 100% cloud	51°F, 6 ↑ 9 mph, 100% cloud

All plant and animal species identified during the survey were recorded in field notes. Garmin® hand-held, global positioning system (GPS) units were used to survey straight-line transects and record Universal Transverse Mercator (UTM) coordinates (North American Datum – NAD 83) for property boundaries, Joshua tree locations, and other pertinent information (Appendix C). A digital camera was used to take representative photographs (Appendix D), with locations and directions of exhibits shown in Figure 5. ©2023 Google™ Earth was accessed via the internet to provide available aerial photographs of the subject property and surrounding areas (Figure 4).

3.0. Results

3.1. Common Biological Resources. The common plant and animal species identified during the survey are listed in Appendices A and B, respectively. Based on DeLorme Topo USA® 10.0 software, elevations on the subject property range from approximately 980 meters (3,220 feet) at the southwest corner down to 975 meters (3,195 feet) at the northeast corner. Terrain is relatively flat, with a slight northern aspect, and soils are comprised of relatively sandy loam. Although there is an old road in which runoff is flowing from south-to-north (see upper half of Figure 4 and Exhibit 4), there are no blueline streams designated by the U.S. Geological Survey (USGS) occur on-site.

3.1.1. *Common Flora.* The 45 plant species identified onsite and nine species identified in adjacent areas during the survey are listed in Appendix A. The site is comprised of Mojavean creosote bush scrub and Joshua tree woodland. In terms of abundance, the dominant shrubs and trees found onsite include creosote bush (*Larrea tridentata*), burrobush (*Ambrosia dumosa*), Joshua tree (*Yucca brevifolia*), Mohave yucca (*Yucca schidigera*), three species of *Ephedra* (*californica*, *nevadensis*, and *viridis*), and desert goldenhead (*Acamptopappus sphaerocephalus*). Four species of cacti are also common, including silver cholla (*Cylindropuntia echinocarpa*), pencil cholla (*Cylindropuntia ramosissima*), beavertail cactus (*Opuntia basilaris*), and hedgehog cactus (*Echinocereus engelmannii*).

3.1.2. *Common Fauna.* The six bird and seven mammal species identified during the survey are listed in Appendix B. Given the timing of the survey and relatively cool temperatures, no reptile species were observed or identified. Locally common reptile species that may occur include common side-blotched lizard (*Uta stansburiana*), zebra-tailed lizard (*Callisaurus draconoides*), long-nosed leopard lizard (*Gambelia wislizenii*), desert horned lizard (*Phrynosoma platyrhinos*), desert night lizard (*Xantusia vigilis*), red racer (*Masticophis flagellum*), glossy snake (*Arizona elegans*), gopher snake (*Pituophis melanoleucus*), long-nosed snake (*Rhinocheilus lecontei*), and various rattlesnake species (*Crotalus* spp.).

Among the six species of birds observed, common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), and rock dove (*Columba livia*) are among species that are tolerant of and even benefitted by urbanizing development. Ladder-backed woodpeckers (*Picoides scalaris*) are present because of the abundance of Joshua trees. For the first time in over 30 years of surveying the Morongo Basin, a flock of six Canada geese (*Branta canadensis*) was observed during the survey, flying over the site, and fresh goose scats were observed several hundred feet west of the site on peripheral transects.

Mammals, including kangaroo rat (*Dipodomys* sp.), black-tailed hare (*Lepus californicus*), Audubon cottontail (*Sylvilagus audubonii*), and especially California ground squirrel (*Otospermophilus beecheyi*) are among those that are also relatively tolerant of human development; as are the two predators that were detected, including coyote (*Canis latrans*) and bobcat (*Lynx rufus*). LaRue inspected 36 wood rat (*Neotoma lepida*) middens for tortoise scats and carcass fragments, none of which was observed. The absences of kit fox (*Vulpes macrotis*) and American badger (*Taxidea taxus*) signs are evidence of the impacts of human development that characterizes the immediate area.

3.2. Uncommon Biological Resources.

3.2.1. *Agassiz's Desert Tortoise.* No tortoise sign was found either on-site or in adjacent areas during this focused, protocol survey for the species (USFWS 2019). Based on the absence of tortoise sign on the subject property, in adjacent areas, and reported from the region (see Figure 3), CMBC concludes that Agassiz's desert tortoise is absent from the subject property and action area. Although tortoise sign was recently documented to the east (CMBC 2021), there is limited likelihood of wild tortoises entering the site from adjacent areas, either to pass through the site or establish residency.

Since 1989, CMBC personnel have performed approximately 298 focused tortoise surveys on about 16,000 acres located in the Morongo Basin, between Yucca Valley and Twentynine Palms. As depicted in Figure 3, 19 of these sites have been surveyed within approximately one mile of the subject property. The nearest and most recent of these was on a 60-acre site, managed by the Mojave Desert Land Trust, where the older scat of an adult tortoise was found in 2021 (CMBC 2021) approximately 500 feet to the southeast. The pattern shows that tortoises still occur east and south of the subject property, but have been eliminated from urban and suburban areas to the west and north, respectively.

Encounter rates for observable human disturbances included (in descending order of prevalence) 34 cross-country vehicle tracks, 32 roads and trails, which include a compacted dirt road along the eastern boundary and an old road running through the center of the site (upper half of Figure 4, Exhibit 4), 12 domestic dog signs (mostly digs), 3 older shot gun shells, and 2 dumps, including vegetation and dirt. As depicted in the lower half of Figure 4 and in Exhibit 2, the parcel immediately north of the site was bladed prior to 2021, with cacti, Joshua trees, and a few other shrubs remaining. Many of the OHV tracks resulted from those blading activities entering onto the northern parts of the subject property. Collectively, these are the types of disturbances that eliminate tortoises from suitable habitats, but it is mostly the extreme urbanization of the area that is mostly responsible.

With the publication of the Bureau of Land Management's (BLM) Record of Decision (BLM 2016), the Desert Renewable Energy Conservation Plan (DRECP) revised the 1980 California Desert Conservation Area Plan (CDCA Plan; BLM 1980) in significant ways for the conservation and recovery of desert tortoises in the California Deserts. Although desert tortoise critical habitat was not changed (USFWS 1994a), Desert Wildlife Management Areas (DWMAs; USFWS 1994b) and Multiple Use Classes on BLM lands were eliminated. In addition to critical habitat, the two main designated areas under the DRECP CDCA Plan amendment that provide for tortoise conservation and recovery are Areas of Critical Environmental Concern (ACECs) and California Desert National Conservation Lands (CDNCLs). The subject property is not found within any of these conservation areas.

The subject property is approximately 22 miles west of the nearest CDNCL-designated lands located in the Pinto, Lucerne Valley, and Eastern Slopes CDNCL subarea. As per the official DRECP website (www.drecp.org) and Appendix B, which depicts boundaries of management areas, the subject property is located 22 miles west of the nearest desert tortoise ACEC, which is the Pinto Mountains ACEC. The site is not found within Agassiz's desert tortoise critical habitat, which was designated in 1994 (U.S. Fish and Wildlife Service 1994a). The nearest critical habitat area is the Pinto Mountains Critical Habitat Unit, which is also located approximately 22 miles east of the site.

3.2.2. *Other Special Status Species.* U.S. Fish and Wildlife Service (2008), California Department of Fish and Wildlife [CDFW 2023a for California Natural Diversity Data Base; 2023b for Special Plant Species list; 2023c for Special Animal Species list; and California Native Plant Society (CNPS 2023)] maintain lists of animals and/or plants considered rare, threatened, or endangered, which are herein collectively referred to as “special status species.” No regulatory agency-designated special status species were identified during the current survey. Life history and occurrence information for rare species observed during surveys of on one or more of the sites depicted in Figure 3 are given in the next few subsections.

Cooper’s hawk (*Accipiter cooperi*) is a year-round resident raptor species that is designated as a Watch List species by CDFW (2023c). Coopers hawks have been observed during five surveys (CMBC 2005a, 2005b, 2006, 2007, and 2008) among the 20 sites depicted in Figure 3. There are not any nesting sites on the subject property but there are foraging habitats throughout, and plenty of small and medium-sized birds on which Cooper’s hawks can prey.

Prairie falcon (*Falco mexicanus*) is designated as a Watch List species by CDFW (2023c) and a Bird of Conservation Concern by the USFWS (2008). Although not observed during the survey, a prairie falcon was detected on the eastern adjacent property in 2004 (CMBC 2004b). There are no suitable nesting substrates (cliff faces and other inaccessible areas) onsite but foraging habitat exists throughout.

Northern harrier (*Circus hudsonius*) is designated as a California Species of Special Concern (CDFW 2023c) and does not have a federal status. Although there are a few locations in the West Mojave where harriers nest (Edwards Air Force Base and Harper Lake), they are mainly known as fall migrants through the region in September and October, with wintering birds largely departing by mid-April. Migrants in the deserts are widespread in open habitats, including marshes, grasslands, pastures, agricultural fields, saltbush scrub, and even creosote scrub. Although one was observed flying over the adjacent eastern parcel in 2004 (CMBC 2004b), there are neither nesting nor foraging habitats on the subject property.

LeConte’s thrasher (*Toxostoma lecontei*) is designated as a California Species of Special Concern by CDFW (CDFW 2023c) and as a Bird of Conservation Concern by the USFWS (2008). LeConte’s thrashers have been observed twice, including approximately one mile south (CMBC 2004a) and on the adjacent eastern parcel (CMBC 2004b), which are relatively large parcels with contiguous open space. There are both suitable nesting and foraging habitats throughout the subject property. LeConte’s thrashers may nest in several cactus species, particularly silver cholla (*Cylindropuntia echinocarpa*).

Loggerhead shrike (*Lanius ludovicianus*) is designated as a California Species of Special Concern by CDFW (2023c) and a Bird of Conservation Concern by the USFWS (2008). As mapped in Figure 3, one was observed on the eastern adjacent parcel in 2004 (CMBC 2004b). Having been observed 44 times by CMBC personnel between 1989 and 2023, this has been the most frequently encountered rare bird species in the Morongo Basin. There are suitable nesting substrates and foraging habitats for loggerhead shrikes throughout the subject property.

Little San Bernardino Mountains linanthus (*Linanthus maculatus* ssp. *maculatus*) is considered by CNPS (2023) to be a List 1B.2 plant, which means it is rare, threatened, or endangered in California and elsewhere; and, specifically, fairly threatened in California (moderate degree/immediacy of threat) and is not designated by either CDFW or USFWS. This annual herb, which blooms from March to May following winters of sufficient rainfall may be detectable for only a brief period and only following favorable rainfall conditions. Occurring in desert dunes, Joshua tree woodland, and Mojavean creosote bush scrub (CNPS 2023), the diminutive annual plant is extremely difficult to find, requiring a focused survey for its detection. LaRue is very familiar with the species, having found 70 individual plants on the 4.5-acre site located 2,600 feet southwest of the subject property (CMBC 2010). Given the location and habitats, there is some potential that it occurs on the subject property but would not have been detectable during the current survey.

Burrowing owl is designated as a California Species of Special Concern by CDFW (2023c), as a Bird of Conservation Concern by the USFWS (2008), and is considered Sensitive by the BLM (CDFW 2023a). It is one of the focal species specifically sought during field surveys, particularly in adjacent areas, and is usually detected by distinctive feathers, zygodactyl (x-shaped) tracks, and whitewash (fecal material deposited away from burrows may be from other bird species). Although pellets and feathers are sufficiently distinctive that they may be identified away from burrows, it is one or more of these signs at sufficiently large burrows that are the most definitive means of determining burrowing owl use of a given site.

In the case of the subject property, there was no evidence of burrowing owl. The site is too densely vegetated to be suitable. Regionally, CMBC has detected burrowing owls on 13 sites in Joshua Tree, 11 sites in Twentynine Palms, 5 sites in the Landers/Yucca Mesa area, and at only one site in Yucca Valley. In 2006 (CMBC 2006a), LaRue observed a burrowing owl on a 140-acre site located approximately 1.6 miles northwest of the subject property, and burrowing owl signs were found on a 2.2-acre site located 2.25 miles east (CMBC 2006b). Like so many observations, the Yucca Valley account (CMBC 2006a) was observed in a barren area, in the bank of an old borrow area where the vegetation had been mechanically removed. In more than 110 focused surveys within the Town limits of Yucca Valley, this is the only survey where burrowing owl was detected. So, as given above, the site is considered too densely vegetated to be suitable for burrowing owl, which is determined to be absent.

3.3. Other Protected Biological Resources.

3.3.1. *Stream Courses.* Stream courses provide relatively important resources to animals and plants. In dry years, and particularly during prolonged drought, annual plants may only germinate in the vicinity of washes where the water table is relatively near the surface. Perennial shrubs adjacent to washes are often the only plants that produce flowers and fruit, which in turn are important to insects and the avian predators that feed on them. Shrubs also tend to be somewhat taller and denser alongside washes, which provides cover for medium and larger sized animals that may use them as travel corridors. Biodiversity is generally enhanced by washes, and there are often both annual and perennial plants that are either restricted to or mostly associated with wash margins. There are both anecdotal

accounts and published literature on washes being important to tortoises, which use them as travel corridors and access to nearby annual forage. There are no washes on the subject property, although rainwater runoff is being channeled south-to-north inside an abandoned dirt road through the middle of the site.

3.3.2. *Protected Plant Species.* At the Town level, the following information is taken from an undated brochure, entitled *Town of Yucca Valley, Before You Remove Native Vegetation, What You Need To Know About "Protected Native Plants."* This brochure reiterates regulations for protecting a variety of native plants identified in Town Ordinance No. 140 of 2003. Compliance with the Native Plant Protection and Management ordinance helps promote the continued health of the Town's abundant and diverse plant resources by not allowing the indiscriminate removal, and to further promote the protection of native plants and their relationship to the identity of the Town.

Regulated Desert Native Plants include:

- All species of genus *Prosopis* (mesquites): stems 2" & greater in diameter or 6' or greater in height.
- Creosote rings (10' or greater in diameter).
- All species of yuccas, including those commonly found in Yucca Valley:
 - Mojave yucca (*Yucca shidigeria*)
 - Chaparral yucca (*Yucca whipplei*)
 - Joshua trees (*Yucca brevifolia*)
- California juniper (*Juniperus californica*)
- Desert willow (*Chilopsis linearis*)
- Piñon pine (*Pinus monophylla*)
- Palo verde (*Cercidium* sp.) [excluding Mexican palo verde (*Parkinsonia aculeata*), which is not native to California]
- Manzanita (*Arcostaphylos* sp.)
- Additional plants protected or regulated by the California Desert Native Plants Act.

At the State level, the 1998 Food and Agricultural Code, Division 23: California Desert Native Plants, Chapter 3: Regulated Native Plants Act, Section 80073 states: The following native plants, or any parts thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

- (a) All species of the family Agavaceae (century plants, nolinias, yuccas).
- (b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 (i.e., saguaro and barrel cacti), which may be harvested under a permit obtained pursuant to that section.
- (c) All species of the family Fouquieriaceae (ocotillo, candlewood).
- (d) All species of the genus *Prosopis* (mesquites).
- (e) All species of the genus *Cercidium* (palo verdes).
- (f) *Senegalia* (*Acacia*) *greggii* (catclaw acacia).
- (g) *Atriplex hymenelytra* (desert holly).
- (h) *Dalea* (*Psoralea*) *spinosa* (smoke tree).
- (i) *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

Joshua tree, Mojave yucca, silver cholla, pencil cholla, beavertail cactus, and hedgehog cactus are the plant species included in one or both above lists that were observed on the subject property. Desert willow is highlighted in Appendix B as a species that was detected during the 9 January 2023 survey, but it was on the adjacent eastern site and will therefore not be lost to site development.

4.0. Conclusions and Recommendations

4.1. Impacts to Agassiz’s Desert Tortoise and Proposed Mitigation. Based on the absence of tortoise sign on-site and in adjacent areas, and available information reviewed for this habitat assessment, CMBC concludes that tortoises are absent from the subject property. As such, no impacts are anticipated, and no mitigation measures are recommended.

Whereas USFWS survey protocols historically indicated that the results of a given survey were valid for the period of only one year (USFWS 2010 and 2018), according to the revised, 2019 USFWS pre-project survey protocol, *“If the survey data are more than a year old, we encourage project proponents to contact us at the earliest possible time to allow us to assess the specific circumstances under which the data were collected (e.g., time of year, drought/rainfall conditions, size and location of the site, etc.) and to discuss whether additional surveys would be appropriate. Spatial information can be provided in pdf and GIS formats.”* At the time of this writing, the Palm Springs office of the USFWS would be the appropriate office to contact [(760) 322-2070] to determine if another survey should be performed prior to ground disturbance, if it does not occur before January 2024.

It is our understanding that the Town routinely requires pre-disturbance clearance surveys within 30 days of grubbing vegetation, so that survey will be an opportunity to confirm that tortoises are still absent immediately prior to construction.

Regardless of survey results and conclusions given herein, tortoises are protected by applicable State and federal laws, including the California Endangered Species Act and Federal Endangered Species Act, respectively. As such, if a tortoise is found on-site at the time of construction, all activities likely to affect that animal(s) should cease and the Town contacted to determine appropriate steps.

Importantly, nothing given in this report, including recommended mitigation measures, is intended to authorize the incidental take of Agassiz’s desert tortoises during site development. Such authorization must come from the appropriate regulatory agencies, including CDFW (i.e., authorization under section 2081 of the Fish and Game Code) and USFWS [i.e., authorization under section 10(a)(1)(B) of the Federal Endangered Species Act].

4.2. Impacts to Other Biological Resources and Proposed Mitigation.

4.2.1 *Other Special Status Species.* Based on the field survey and habitat assessment, CMBC concludes that none of the following special status species reported from the region will be adversely affected by site development: Burrowing owl, Cooper's hawk, northern harrier, or prairie falcon. As such, no adverse impacts have been identified and no mitigation measures are recommended.

Those species for which suitable habitats are present include LeConte's thrasher, loggerhead shrike, and Little San Bernardino Mountains linanthus. As mentioned above, the Town will require a preconstruction survey, so during that survey it will be important to look for nesting birds, as described below, including thrasher and shrike nests. If found, avoidance measures can be implemented and significant impacts avoided. If linanthus occurs onsite, which would need to be determined during focused surveys in March and April following favorable winter rainfall, the loss of eight acres from the region is not considered to be a significant impact.

4.2.2. *Other Protected Biological Resources.*

4.2.2.a. Stream Courses. Given the absence of streams on the subject property, no follow-up measures are identified.

4.2.2.b. Protected Plants. It is beyond the scope of this focused survey and general resource assessment to provide necessary baseline data (except for Joshua trees) and a proposed program to minimize and mitigate impacts to protected native desert plants. The Town typically requires a Desert Native Plant Assessment to identify the numbers and locations of protected plants to be in compliance with the California Native Plant Protection Act. Joshua tree, Mojave yucca, silver cholla, pencil cholla, beavertail cactus, and hedgehog cactus are species found on-site that may be subject to pertinent development codes.

We expect the California Fish and Game Commission to decide if Joshua tree will be newly listed as a threatened or endangered species in April 2023. However, deadlines have been missed twice and this decision has been postponed on those two occasions. Until which time that decision has been made, candidate species for listing, like the Joshua tree, must be treated as if listed and all impacts avoided. In the meantime, the Town will work with the proponent to determine what is needed to fully mitigate impacts to Joshua trees.

4.2.2.c. Bird Nests. Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests, including raptors and other migratory nongame birds (As listed under the Migratory Bird Treaty Act). Typically, CDFW requires that vegetation not be removed from a project site between March 15 and September 15 to avoid impacts to nesting birds. If it is necessary to commence project construction between March 15 and September 15, a qualified biologist should survey all shrubs and structures within the project site for nesting birds, prior to project activities (including construction and/or site preparation).

Surveys should be conducted at the appropriate time of day during the breeding season, and surveys would end no more than three days prior to clearing. CDFW is typically notified in writing prior to the start of the surveys. Documentation of surveys and findings should be submitted to the CDFW within ten days of the last survey. If no nesting birds were observed project activities may begin. If an active bird nest is located, the plant in which it occurs should be left in place until the birds leave the nest. No construction is allowed near active bird nests of threatened or endangered species. As given above, the preconstruction survey to be performed within 30 days of ground disturbance is the ideal opportunity to look for and avoid nesting birds.

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Appendix A. Plant Species Detected

The following plant species were identified on-site during the focused floral inventory described in this report. Protected plant species are highlighted in red and signified by “(PPS)” following the common names. The nine species found only in adjacent areas are signified by “+.”

Ephedraceae

Ephedra californica
Ephedra nevadensis
Ephedra viridis

Joint-fir family

Desert tea
Nevada joint-fir
Green joint-fir

ANGIOSPERMAE: DICOTYLEDONES

DICOT FLOWERING PLANTS

Asteraceae

Acamptopappus sphaerocephalus
Ambrosia acanthicarpa
Ambrosia dumosa
Ambrosia salsola
+*Chaenactis fremontii*
Dyssodia cooperi
Pectis papposa
+*Senecio flaccidus*
Stephanomeria pauciflora
Tetradymia stenolepis
Viguiera parishii
Xylorhiza tortifolia

Sunflower family

Desert goldenhead
Annual bur-sage
Burrobush
Cheesebush
Desert pincushion
Cooper's dyssodia
Chinch weed
Groundsel
Desert milk aster
Mohave horsebrush
Parish's goldeneye
Desert aster

Bignoniaceae

+*Chilopsis linearis* ssp. *arcuata*

Bigonia family

Desert willow (PPS)

Boraginaceae

Amsinckia tessellata

Borage family

Fiddleneck

Brassicaceae

**Brassica tournefortii*
Caulanthus lasiophyllus (*Guillenia lasiophylla*)
+*Descurainia pinnata*
+**Sisymbrium altissimum*
+**Sisymbrium irio*

Mustard family

Saharan mustard
California mustard
Tansy
Tumble mustard
London rocket

Cactaceae

Cylindropuntia echinocarpa
Cylindropuntia ramosissima
Echinocereus engelmannii
Opuntia basilaris

Cactus family

Silver cholla (PPS)
Pencil cholla (PPS)
Hedgehog cactus (PPS)
Beavertail cactus (PPS)

Chenopodiaceae

**Salsola tragus*

Cuscutaceae

Cuscuta sp.

Euphorbiaceae

Euphorbia albomarginata

Stillingia linearifolia

Fabaceae

Parkinsonia aculeata

Senna armata

Geraneaceae

**Erodium cicutarium*

Hydrophyllaceae

Phacelia c.f. *distans*

Krameriaceae

Krameria (grayi) bicolor

Lamiaceae

Sambucus nigra ssp. *caerulea*

Malvaceae

Sphaeralcea ambigua

Onagraceae

Oenothera deltoides

Polemoniaceae

Eriastrum c.f. *sapphirinum*

Polygonaceae

Eriogonum fasciculatum

Eriogonum inflatum

Eriogonum maculatum

+*Eriogonum nidularium*

Eriogonum plumatella

Rosaceae

Coleogyne ramosissima

Goosefoot family

Russian thistle

Dodder family

Dodder

Spurge family

Rattlesnake weed

Stillingia

Pea family

Mexican palo verde

Senna

Geranium family

Red-stemmed filaree

Water-leaf family

Common phacelia

Krameria family

White rhatany

Mint family

Paper-bag bush

Mallow family

Desert mallow

Evening-primrose family

Devil's lantern

Phlox family

Woolly star

Buckwheat family

California buckwheat

Desert trumpet

Spotted buckwheat

Whiskbroom

Yucca buckwheat

Rose family

Blackbush

Solanaceae

+*Lycium cooperi*

Nightshade family

Peach thorn

Zygophyllaceae

Larrea tridentata

Caltrop family

Creosote bush

ANGIOSPERMAE: MONOCOTYLEDONES

MONOCOT FLOWERING PLANTS

Liliaceae

Yucca brevifolia

Yucca schidigera

Lily family

Joshua tree (PPS)

Mojave yucca (PPS)

Poaceae

Aristida c.f. *purpurea*

**Bromus madritensis* ssp. *rubens*

+**Bromus tectorum*

Pleuraphis rigida

**Schismus* sp.

Grass family

Three-awned grass

Red brome

Cheat grass

Big galleta

Split-grass

* - indicates a non-native (introduced) species.

c.f. - compares favorably to a given species when the actual species is unknown.

Some species may not have been detected because of the seasonal nature of their occurrence. Common names are taken from Beauchamp (1986), Hickman (1993), Jaeger (1969), and Munz (1974).

Appendix B. Animal Species Detected

The following animal species were detected during the general biological inventory described in this report. Those only found in adjacent areas are signified by “+.”

AVES

Anatidae

Branta canadensis

Columbidae

Columba livia

Zenaida macroura

Picidae

Picoides scalaris

Corvidae

Corvus corax

Fringillidae

Carpodacus mexicanus

MAMMALIA

Leporidae

Lepus californicus

Sylvilagus audubonii

Sciuridae

Otospermophilus beecheyi

Heteromyidae

Dipodomys sp.

Cricetidae

Neotoma lepida

Canidae

Canis latrans

Felidae

Lynx rufus

BIRDS

Ducks, geese and swans

Canada goose

Pigeons and doves

Rock dove

Mourning dove

Woodpeckers

Ladder-backed woodpecker

Crows and jays

Common raven

Finches

House finch

MAMMALS

Hares and rabbits

Black-tailed hare

Audubon cottontail

Squirrels

California ground squirrel

Pocket mice

Kangaroo rat

Rats and mice

Desert wood rat

Foxes, wolves and coyotes

Coyote

Cats

Bobcat

Nomenclature follows Stebbins, *A Field Guide to Western Reptiles and Amphibians* (2003), third edition; Sibley, National Audubon Society, the Sibley Guide to Birds (2000), first edition; and Ingles, *Mammals of the Pacific States* (1965), second edition.

Appendix C. Field Data Sheets Completed on 9 January 2023

The USFWS and County recommend that consultants include copies of field data sheets from which the results and conclusions given in their reports are derived. As such, copies of the data sheets completed by Ed LaRue follow on this and the next page.

USFWS 2009 DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET

Date of survey: 9/5/2023 Survey biologist(s): Ed LaRue
(day, month, year)

Site description: 2.0-acre Ac clay eastern bandway of Yucca Valley, CA
(project name and size; general location)

County: San Bernardino Quad: Joshua Tree N Location: 558100/3776780 HE corner (NAD 83)
(UTM coordinates, lat-long, and/or TMS, map datum)

Transect #: 19 Transect length: Variable Type of survey: 100% presence/absence w/ peripheral Buca transect
(project area size to be surveyed, 100% coverage/probabilistic sampling)

GPS Start-point: 558045/3776780 3,197 feet Start time: 1200 am/pm
(easting, northing, elevation in meters)

GPS End-point: 558100/3776600/3,207 feet End time: 1600 am/pm
(easting, northing, elevation in meters)

Start Temp: 57 °F Weather: 100% cloud cover, light rain, windy 6-17 SW

End Temp: 51 °F

Live Tortoises

Detection number	GPS location		Time	Tortoise location <small>(in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)</small>	Approx MCL >160-mm? <small>(Yes, No or Unknown)</small>	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, scats, carcasses, etc)

Detection number	GPS location		Type of sign <small>(burrows, scats, carcasses, etc)</small>	Description and comments
	Easting	Northing		
1				
2				
3				
4				
5				
6				
7				
8				

Page: _____ of _____

Date of survey: _____

Transect number: _____

JOB #/NAME	DATE	DRIVE TIME	MILES	FIELD TIME	SURVEYORS				
Lakeshore YV. 2223	1/9/23	TO 1145 FROM 1745	104	BEGIN 1800 END 1600	EJ Lake				
WEATHER CONDITIONS (Start/End)			UTM (NAD 83) (circle starting corner)						
TEMP: 51°F WIND X: 13 ↑ 11 NSEW CLOUD: 500%			NE → W NW → SE → SW →						
TEMP: 51°F WIND X: 6 ↑ 9 NSEW CLOUD: 100%			558100 7915 558100 7915 3776780 6780 6600 6600						
PERENNIAL PLANTS		ANNUAL PLANTS		BIRDS	HERP	MAM			
Lacti Eph Nev		Elack Zoti		MorD		Blly			
Mueshi Eph Cal		Seng Sisari		CRA		KGT			
Abam Galam		Amh An Sal Satr				CAGS			
Cyl Ech Totse		Pri (Sap) Ari Pur				PuPA			
Eni Int Bi Pla		Lui Las Am Chempale		5 Cuckoo!		Aulo			
Cyl Bam Xul Ter		Breter Pestin		Fly over lake also		Bobert			
Muebe Anasa		Bromed Salwa		CAGS East on site		Coval			
Epa Amb Eph Vir		Amr ks Che Fe		Zofit low					
Amo Sal Ler Par		St Exi Phacors		HOFI	Photographs				
Kabara Str Pan		Eup Alb Proze		ROCK	1	8045 6780			
Sent Amy Walel		keckup (ornid)		LBWP	2+3	NW → NE → SE			
Salmax Chilan Zofit		Blimee cendei			8 wash	7970/6680			
Op u Bes Ori Es		Dys Cos			5	SE → NW			
Egphg taitar		Sh Pau			6	SW → NE			
Plu Pte Sen Fla					7	7930/6540			
Anceda Lyo 600									
OBSERVABLE HUMAN DISTURBANCES									
T#	East	North	OHV	Road	Dog	Dump	S Gun	Rifle	Target
1	8100	6780		North highway		priced partially			bladed - Cell tower
2	7915	6770	4-	from adjacent		blady → N			on NE
3	8045	6760				ves			corner
4	7915	6750							
5	8045	6740							
6	7915	6730							
7	8100	6720							
8	7915	6710							
9	8100	6700				cut			
10	7915	6690		↓					
11	8100	6680							
12	7915	6670							
13	8100	6660							
14	7915	6650							
15	8100	6640							
16	7915	6630							
17	8100	6620							
18	7915	6610							
19	8100	6600							
			34	32	id				

45P
Project

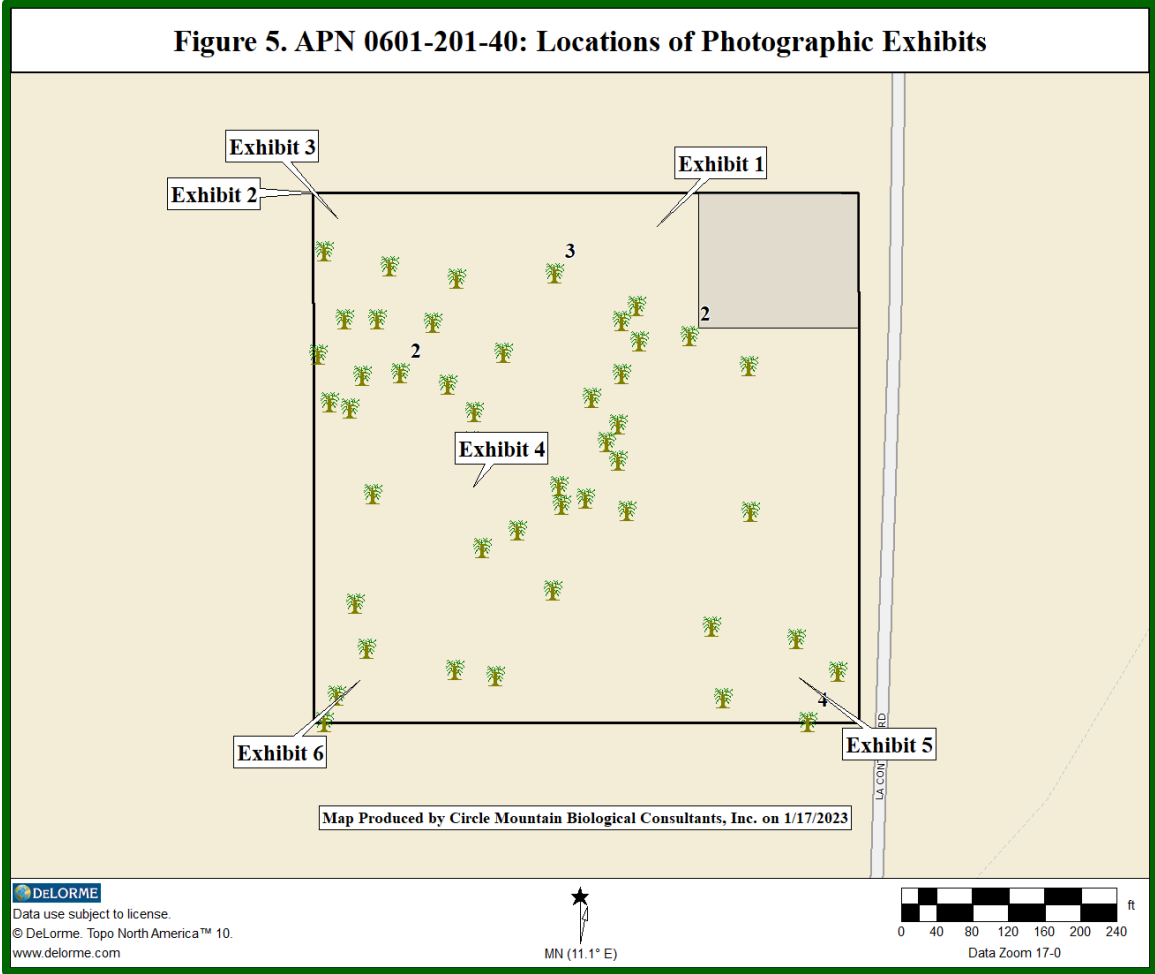
36 +
350
307

→ FW
bladed
vs not
S

Wash off
→ NE

Topography and soils: Sandy to gravelly decomposed granite on lower ba'ida

Appendix D. Photographic Exhibits



Locations of the five photographic exhibits on the next three pages are depicted in Figure 5.



Exhibit 1. View from near the northeast corner of the parcel, facing southwest (see Figure 5 for locations and directions of photographs).



Exhibit 2. View from the northwest corner, facing south, showing bladed areas to the north, offsite.



Exhibit 3. View from the northwest corner of the parcel (same as #2), facing southeast.

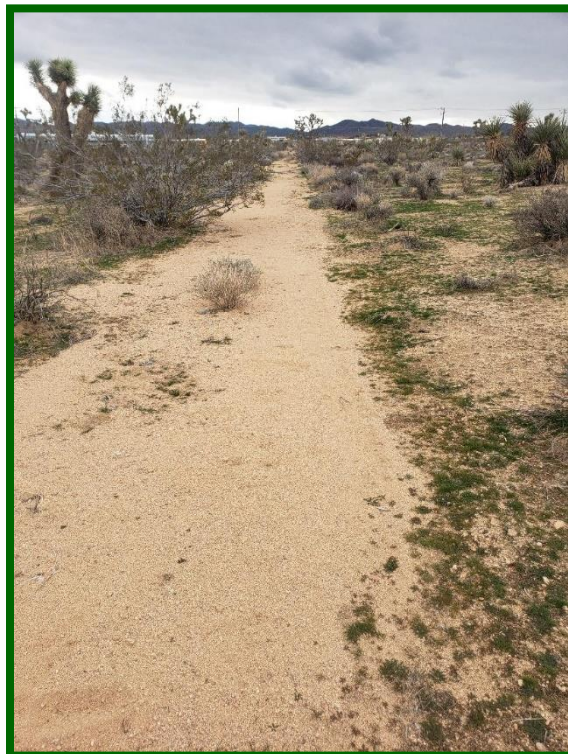


Exhibit 4. View of an old road through the site that resembles as wash (see lower part Figure 4).



Exhibit 5. View from the southeast corner of the parcel, facing northwest.



Exhibit 6. View from the southwest corner of the parcel, facing northeast.

APPENDIX E. DATA FOR JOSHUA TREE OBSERVATIONS (NAD 83)

Condition = Poor, Moderate, and Good

Condition	NO. TRUNKS (HEIGHTS)	EAST	NORTH	Condition	NO. TRUNKS (HEIGHTS)	EAST	NORTH
G	3 (1' ↑ 4')	557997	3776752	G	3'	557970	3776705
G	12'	557941	3776754	G	11'	558010	3776710
G	16'	557919	3776759	G	2'	558019	3776701
G	19'	557964	3776750	G	15'	558015	3776695
G	16'	558025	3776741	G	8'	557970	3776695
G	11'	558020	3776736	G	7'	558019	3776689
G	12'	557937	3776736	G	10'	558022	3776672
P	7'	557926	3776736	G	16'	557964	3776618
G	3'	557956	3776735	G	13'	557920	3776600
G	4'	557980	3776725	G	3'	558008	3776676
G	13'	558026	3776729	G	6'	557999	3776680
G	2 (11' & 15')	558043	3776731	G	11'	558000	3776674
G	2 (5' & 17')	557945	3776718	G	15'	557936	3776677
M	18'	557978	3776616	G	18'	557985	3776665
G	13'	558055	3776609	G	4'	558064	3776672
G	4 (3 ↑ 13)	558084	3776601	G	14'	557973	3776659
G	13'	558063	3776721	G	6'	557997	3776645
G	14'	558020	3776718	G	13'	558051	3776633
G	9'	557932	3776717	G	3'	557930	3776640
M	12'	557917	3776724	G	10'	557934	3776625
G	13'	557921	3776708	G	13'	558080	3776629
G	15'	557928	3776706	G	17'	558094	3776618
P	5'	557961	3776714	M	9'	557924	3776609