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May 20, 2022

Peyman Behvand, Planning Manager
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Subject: The Greentree Project (File No. 16-289), Draft Environmental Impact Report, SCH No. 2019049003, City of Vacaville, Solano County

Dear Mr. Behvand:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (EIR) for The Greentree Project (File No. 16-289) (Project) from the City of Vacaville (City) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

CDFW is submitting comments on the EIR to inform the City, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project.

CDFROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION SUMMARY

Proponent: Greentree Development Group, Inc.

Objective: The Project includes residential and commercial development including park and recreational facilities.

[1] CEQA is codified in California Public Resources Code section 21000 et seq. The "CEQA Guidelines" are in Title 14 of the California Code of Regulations section 15000 et seq.

Location: The Project is located on an approximately 185-acre site west of Leisure Town Road north and south of Sequoia Drive in the City of Vacaville, Solano County at approximately latitude 38.375697°N, longitude -121.935120°W.

Timeframe: Project construction is anticipated to begin in mid-2023 and take up to 10 years to complete.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project**. The Project has the potential to impact Swainson's hawk (*Buteo swainsoni*), a CESA listed as threatened species, as further described below.** Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the project proponent's obligation to comply with CESA.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to LSA Notification requirements. **It appears the Project would impact drainage features that may constitute streams under Fish and Game Code section 1602, as further described below.** CDFW would consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those recommended by CDFW below, CDFW concludes that an EIR is appropriate for the Project.

I. Mandatory Findings of Significance: Does the Project have the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

Environmental Setting and Mitigation Measures

Comment 1: Swainson's Hawk, EIR Pages 4.7-8 and 4-25

Issue: The EIR indicates that a Swainson's hawk pair was confirmed to be nesting on the Project site in 2021, there are several large trees on the Project site that are potentially suitable for nesting Swainson's hawk, and several stick nests were observed in trees on and near the Project site. There are several California Natural Diversity Database (CNDDB) documented occurrences of nesting Swainson's hawk in in the vicinity of the Project site, including within 0.25 mile. The EIR identifies that the Project may result in impacts to Swainson's hawk and the proposed Mitigation Measure (MM) BIO-2 requires that surveys for this species be conducted within 0.25 mile of the study area and within 15 days prior to the commencement of Project construction between March 1 and August 31; however, such surveys may not detect the species and are inconsistent with the following survey protocols referenced in MM BIO-2: *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (2000) survey protocol prepared by the Swainson's Hawk Technical Advisory Committee (TAC) and *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (1994), prepared by CDFW (see: https://wildlife.ca.gov/Conservation/Survey-Protocols).

Specifically, pursuant to the above survey protocols, multiple surveys should occur within at least two survey periods immediately prior to the Project's initiation and the survey area should include a 0.5-mile radius around all Project activities. Rural and agricultural open space areas away from urban development exist across from the Project site on the east side of Leisure Town Road and include a documented occurrence of nesting Swainson's hawk approximately 0.14 mile from the Project site and additional potential nesting habitat within 0.5 mile.

Specific impacts and why they may occur and be significant: If active Swainson's hawk nests are not detected by the proposed surveys, Swainson's hawks could be

disturbed by Project activities resulting in nest abandonment and loss of eggs or reduced health and vigor and loss of young, thereby substantially reducing the number of the species. Swainson's hawk is CESA listed as a threatened species and therefore is considered to be a threatened species pursuant to CEQA Guidelines section 15380. Therefore, if an active Swainson's hawk nest is disturbed by the Project, the Project may result in a substantial reduction in the number of a threatened species, which is considered a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Recommended Mitigation Measure: For an adequate environmental setting and to reduce impacts to Swainson's hawk to less than significant, CDFW recommends revising MM BIO-2 to remove the language stating that the Swainson's hawk surveys shall be conducted "within 0.25 mile of the study area" and "within 15 days prior to the commencement of construction" and replace with a measure that requires surveys to be conducted by a qualified biologist with experience surveying for and detecting the species pursuant to the *Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley Swainson's Hawk* (2000) survey protocol and conducted within 0.5 mile of the Project site each year that Project activities occur. Pursuant to this protocol, surveys shall be completed for at least the two survey periods immediately prior to the Project's initiation, and three surveys shall be conducted for each survey period. The Project shall obtain CDFW's written acceptance of the qualified biologist and survey report prior to Project construction occurring between March 1 and August 31 each year. If the qualified biologist identifies nesting Swainson's hawks, the Project shall implement a 0.5 mile no disturbance buffer zone around the nest, unless otherwise approved in writing by CDFW. Project activities shall be prohibited within the buffer zone between March 1 and August 31, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP. The remaining language in MM BIO-2 should be retained.

II. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS)?

Environmental Setting

Comment 2: Lake and Streambed Alteration, EIR Pages 4.7-9, 4.7-10

Issue: The EIR indicates that the Project site includes: (1) 10 constructed ditches, some conveying water to Ulatis Creek, and (2) a remnant channel as part of Old Ulatis Creek conveying water to Ulatis Creek through a storm drain outfall. However, the EIR does not identify that these water features may be subject to LSA Notification requirements

under Fish and Game section 1602. Based on a review of Google Earth aerial imagery, some of the onsite drainages are culverted and may support riparian vegetation.

Specific impacts and why they may occur and be potentially significant: It appears that the Project would impact drainages that may constitute streams and support riparian habitat. These drainages may provide habitat for semi-aquatic and terrestrial species, including invertebrates which are a prey-source for birds and other wildlife. Additionally, the drainages may contribute flow and nutrients to Ulatis Creek. Riparian habitat is of critical importance to protecting and conserving the biotic and abiotic integrity of an entire watershed. When riparian habitat is substantially altered, riparian functions become impaired, thereby likely substantially adversely impacting aquatic and terrestrial species. Substantial removal of trees and other vegetation significantly reduces suitable nesting and roosting habitat for many bird and bat species, and causes the loss of important refugia for small mammals. Mature riparian trees and mid canopy vegetation will take considerable time to reestablish and grow to function. Therefore, if the Project impacts stream and associated riparian habitat, impacts to these resources would be potentially significant.

Recommended Mitigation Measure: For an adequate environmental setting and to reduce impacts to streams to less than significant, CDFW recommends that for Project activities that may substantially alter the bed, bank, or channel of onsite drainages or associated riparian habitat, the Project shall consult with CDFW to determine if an LSA Notification is warranted, including providing CDFW with an aerial based map of aquatic features on the Project site showing their connectivity to Ulatis Creek. If CDFW determines that any of the impacted drainages is subject to Fish and Game Code section 160 et seq., the Project shall submit an LSA Notification to CDFW prior to Project construction. If CDFW determines that an LSA Agreement is warranted, the Project shall comply with all required measures in the LSA Agreement, including but not limited to requirements to mitigate impacts to the streams and riparian habitat. Permanent impacts to the stream and associated riparian habitat shall be mitigated by restoration of riparian habitat at a minimum 3:1 mitigation to impact ratio based on acreage and linear distance as close to the Project area as possible and within the same watershed and year as the impact, unless otherwise approved in writing by CDFW. Temporary impacts shall be restored onsite in the same year as the impact. Tree replacement ratios shall adhere to the following minimum ratios.

- 1:1 for removed non-native trees
- 3:1 for removed trees with a diameter at breast height (dbh) of up to 6 inches
- 6:1 for removed trees with a dbh greater than 6 inches
- 10:1 for removed oak trees (if acorns are used, the minimum ratio shall be 15:1)

III. Would the Project have a substantial adverse effect, either directly or through

habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

And,

Does the Project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that incremental effects of the Project are considerable when viewed in connection with effects of past projects, effects of other current projects, and the effects of probable future projects. (MANDATORY FINDING OF SIGNIFICANCE).

Environmental Setting and Mitigation Measures

Comment 3: Burrowing owl, EIR Pages 4.22, 4.26, 4.27

Issues:

Known Nest Sites

The EIR indicates that two pairs of burrowing owls (*Athene cunicularia*) were nesting on the Project site based on surveys conducted in 2021, and a total of nine adult and juvenile burrowing owls were observed on the Project site in Fall 2020. However, planning for development of the Project site has been occurring since at least 2017. In January 2018, the Project consulted with CDFW regarding the proposed impacts to burrowing owls, and on January 18, 2018, CDFW staff conducted a site visit. Sequoia Ecological Consulting, Inc. prepared a draft report for the Green Tree Development Group titled *Green Tree Golf Club Burrowing Owl Exclusion Plan*, dated November 2018 (Plan). The Plan included the results of burrowing owl surveys conducted in 2017-2018, which found seven breeding pairs of burrowing owls on the Project site and six of the seven pairs had confirmed breeding with visible owlets outside burrow entrances. A total of nine burrowing owl territories were found, with numbers of individual burrowing owls observed per survey ranging from 11 to 20. A total of 27 burrowing owls were banded during a four-day banding effort at Green Tree Golf course, 12 juveniles and two adult bachelor males. Seven breeding pairs were observed during banding efforts, with all individuals excepting one adult female color banded. 192 burrows were mapped that showed signs of burrowing owl use or were within burrow complexes where burrowing owls were present on the Project site. Additionally, burrowing owls were observed utilizing man-made structures including storm drains, drainpipes on the sides of buildings, and beneath cement pads of utility structures such as road signs and fire hydrants.

Burrowing owls are philopatric, meaning they show strong fidelity to their nest site and territory from year to year, especially where resident according to the CDFW 2012 *Staff Report on Burrowing Owl Mitigation* (CDFW 2012 Staff Report) (see:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline). The draft *Solano Multispecies Habitat Conservation Plan* (Solano HCP), prepared by the Solano County Water Agency (SCWA), stipulates that any nest site occupied by owls within the last three years is considered a known nest site and impacts to known nests sites require mitigation (see: https://www.scwa2.com/solano-multispecies-habitat-conservation-plan/, Section 6-Mitigation Measures, Pages 6-70 and 6-71). As Project planning including burrowing owl surveys has been occurring since at least 2017, the notice of preparation of the EIR was circulated for public review on April 2, 2019, and the April 2019 physical environmental conditions of the Project site were likely similar to what they were less than one year prior in 2017-2018, the environmental setting (baseline physical conditions) for purposes of CEQA with respect to burrowing owl should be the physical conditions as they existed in 2017-2018 as further described in the Recommended Mitigation Measures section below. Pursuant to CEQA Guidelines section 15125, subdivision (a)(1), "*Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced from both a local and regional perspective*. *Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence*."

The EIR MM BIO-3 requires the preservation of only two known nest sites offsite based on the 2021 surveys and a 1:1 ratio, which would not adequately mitigate impacts to the seven known nest sites described above. On December 20, 2019, CDFW emailed the City and SCWA a proposed conservation strategy for burrowing owl to reduce impacts to burrowing owl to less than significant. The proposed conservation strategy includes a minimum 2:1 ratio of known nest site preservation to known nest site impacts implemented prior to Project impacts and relocating the burrowing owls on the Project site. On April 10, 2020, CDFW in a phone call with the City again indicated that a 1:1 ratio is not adequate to mitigate impacts to known burrowing owl nest sites to less than significant. Based upon further discussions with SCWA and in consideration of preservable known nest sites within Solano County, on December 7, 2020, CDFW emailed a revised burrowing owl conservation strategy to SCWA. It is CDFW's understanding that SCWA was coordinating with the City on the conservation approach for burrowing owls for the Project based on: 1) email communications between the City and SCWA regarding the Project, and 2) CDFW providing the initial conservation strategy to the City and SCWA on December 20, 2019.

Wintering, Non-breeding Owls

The EIR MM BIO-4 indicates that wintering, non-breeding owls may be evicted from their burrows pursuant to a passive relocation plan submitted to the City and CDFW;

however, this measure does not include a 2:1 compensatory mitigation for Project impacts consistent with the conservation strategy CDFW provided. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure. Pursuant to the CDFW 2012 Staff Report, the long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of excluded owls is unknown. Burrowing owls are dependent on burrows at all times of the year for survival or reproduction, therefore eviction from nesting, roosting, overwintering, and satellite burrows or other sheltering features may lead to indirect impacts or "take" which is prohibited under Fish and Game Code section 3503.5. Depending on the proximity and availability of alternate habitat, loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented to avoid "take" (see: https://wildlife.ca.gov/Conservation/Survey-Protocols).

Surveys and Buffer Zones

The EIR MM BIO-4 states that within 14 days prior to the commencement of construction of any phase of the Project, a qualified biologist shall conduct an initial preconstruction survey for burrowing owls within the construction limits and adjacent lands within 250 feet. This survey methodology is unlikely to detect all burrowing owls that could be impacted by the Project and is inconsistent with the CDFW 2012 Staff Report referenced in MM BIO-4. MM BIO-4 also indicates that that the buffer zone around potential nests during breeding season would be 250 feet and around wintering, non-breeding owl sites 160 feet. These buffer zone distances may not adequately protect burrowing owls from visual and auditory disturbances resulting from the Project and are inconsistent with the CDFW 2012 Staff Report.

Specific impacts and why they may occur and be significant: If active burrowing owl nests are not detected by the proposed surveys, the Project may result in burrowing owl nest abandonment, loss of young, reduced health and vigor of owlets, or injury or mortality of adults. The Project would result in the loss of a documented colony of burrowing owls including seven known nest sites. While six of the seven burrowing owl pairs had confirmed breeding, it is likely that the seventh pair had a nest onsite based on the number of burrows present and that the owls were part of the same colony.

Burrowing owl is a California Species of Special Concern (SSC) because the species' population viability and survival are adversely affected by risk factors such as precipitous declines from habitat loss, fragmentation, and degradation; evictions from nesting sites without habitat mitigation; wind turbine mortality; human disturbance; and

eradication of California ground squirrels (*Spermophilus beecheyi*) resulting in a loss of suitable burrows required by burrowing owls for nesting, protection from predators, and shelter (Shuford and Gardali 2008; CDFW 2012 Staff Report; personal communication, CDFW Statewide Burrowing Owl Coordinator Esther Burkett, May 13, 2022). Preliminary analyses of regional patterns for breeding populations of burrowing owls have detected declines both locally in their central and southern coastal breeding areas, and statewide where the species has experienced breeding range retraction (CDFW 2012 Staff Report; personal communication, Esther Burkett, May 13, 2022).

Historically, the most abundant populations of burrowing owl within the San Francisco Bay Area were in Alameda, Contra Costa, and Santa Clara counties and populations were locally abundant within portions of Solano and San Mateo counties. Burrowing owls are no longer abundant and may be disappearing entirely from western Contra Costa, western Alameda, and Santa Clara counties. Habitat loss caused by development is the most immediate threat to burrowing owls in high growth areas of the San Francisco Bay Area, and loss of burrowing owl habitat will likely continue well into the future (Townsend and Lenihan 2007). As urbanization increases and local burrowing owl populations decline, they become vulnerable to stochastic events (demographic, genetic, and environmental) associated with small population size, creating the potential for an extinction "vortex" (Gilpin and Soulé 1986 as cited in Townsend and Lenihan 2007).

According to Dr. Shawn Smallwood, there is an alarming decline in burrowing owl sighting records in *eBird* for the region.[2] Burrowing owls appear to have been extirpated from the City of Davis area. Over his last 10 years of research in the Altamont Pass, burrowing owls declined 45% across eastern Alameda and Contra Costa counties, coinciding with a 63% retraction of the geographic extent of ground squirrel colonies. Numbers of burrowing owl pairs recorded in the Santa Clara Valley Habitat Conservation Plan study area have declined to a mere 17 pairs, and captive breeding is now underway along with juvenile owl overwintering in captivity in an effort to increase numbers of breeding owls, in addition to attempting to establish new breeding sites. In all of the surveys but one Dr. Smallwood performed at proposed project sites across California, he stopped seeing burrowing owls several years ago. He has not seen any burrowing owls over the past year at sites in the Imperial Valley, where they were once more abundant.[3]

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[2] *eBird* is an online database of bird observations providing scientists, researchers and amateur naturalists, see: https://ebird.org/home

[3] Dr. Smallwood has performed observational studies of burrowing owls for 20 years, including at Naval Air Station Lemoore, Dixon National Radio Transmission Facility, and in the Altamont Pass Wind Resource Area, and has published related scientific articles. He served for five years on the Alameda County Scientific Review Committee, which oversaw research and fatality monitoring in the Altamont Pass, and he served on a science panel that made recommendations to the Santa Clara Valley Habitat

Wildlife biologist Chris Conard stated that for the first time in the 20 years he has tracked the burrowing owl population in Sacramento County, for the year 2021 he did not know of any active burrowing owl breeding sites, and CDFW Statewide Burrowing Owl Coordinator Esther Burkett documented only one owl present in 2021 during the breeding season. Mr. Conard noted that 2012 was the last year of fairly widespread burrowing owl breeding in Sacramento County and breeding declined sharply since that time. He also indicated that similar declines and absences in adjacent counties are more alarming, and breeding burrowing owls have mostly disappeared from the Sacramento Valley and have gone from locally common to sporadic in the San Joaquin Valley. Additionally, he noted that for years it seemed like habitat loss and disturbance were the main problem, but that now it seemed like a more fundamental, ecosystem productivity problem; perhaps a combination of earlier declines compounded by drought and other factors, and possibly neonicotinoids causing insect prey declines.

In California, there is evidence of inbreeding documented among burrowing owls, which can lead to inbreeding depression and loss of genetic diversity (personal communication, Esther Burkett, May 16, 2022). Maintaining genetic diversity is important because genetic defects can have a negative effect on the size of a population, and as the population decreases the rate of inbreeding increases, resulting in a negative feedback loop that can eventually drive a population to extirpation or extinction. It is important to incorporate knowledge of the negative consequences of inbreeding and reduced genetic variation into land use planning, because most species now have fragmented distributions due to human activities (Ralls et al. 2017).

The CDFW 2012 Staff Report identifies seven conservation goals for burrowing owl in California, including augment/restore natural dynamics of burrowing owl populations including movement and genetic exchange among populations, such that the species does not require future listing and protection under CESA and/or the federal Endangered Species Act.

Based on the above, Project impacts to seven burrowing owl known nest sites and removal of a colony of burrowing owls would be significant. If nesting or wintering owls are present on or adjacent to the Project and would be impacted, Project impacts to burrowing owls would be significant. The aforementioned impacts would also be “cumulatively considerable" because incremental effects of the Project are considerable when viewed in connection with effects of past projects, effects of other current projects, and the effects of probable future projects, regarding burrowing owl. Cumulatively considerable effects are a Mandatory Finding of Significance pursuant to CEQA Guidelines section 15065, subd. (a)(3).

Agency. Dr. Smallwood worked for wind companies to micro-site their wind turbines as part of repowering the Altamont Pass, with the aim of minimizing impacts to burrowing owls and other species.

Recommended Mitigation Measures: For an adequate environmental setting and to reduce impacts to burrowing owl to less-than-significant, CDFW recommends that the EIR: (1) use the 2017-2018 historic conditions of burrowing owl use of the Project site to establish the environmental setting (baseline physical conditions), including the presence of seven known nest sites, as supported by the substantial evidence presented above; and (2) include the below Mitigation Measure 1 from the above referenced revised burrowing owl conservation strategy CDFW provided on December 7, 2020 including implementation of the mitigation measure in coordination with SCWA and CDFW. Based on the best currently available scientific information, the Mitigation Measure 1 was modified from the December 7, 2007 version, though it is generally similar. The EIR should also include the below recommended Mitigation Measure 2. The EIR mitigation measure for conserving burrowing owl foraging habitat should be retained.

Mitigation Measure 1. Burrowing owl breeding and wintering habitat: Loss of a nest or wintering site used by burrowing owls within the last three years shall be mitigated by permanent preservation of two known nest or wintering sites used within the last breeding or wintering season, respectively, with sufficient foraging habitat to support the nesting or wintering owls. Permanent nest or wintering site preservation shall include:

(a) Purchasing burrowing owl breeding or wintering credits from a CDFW-approved conservation bank, which CDFW has verified is in good standing at the time of the purchase, before Project construction begins.

Or;

(b) Permanently protecting nest or wintering sites and foraging habitat within Solano County through placement of a conservation easement and implementing and funding in perpetuity a long-term management plan before Project construction begins. Preserved nest or wintering sites and sufficient foraging habitat, and the long-term management plan and implementation funding, must be reviewed and accepted by CDFW.

Or;

(c) If credits and nest or wintering sites are not available, the Project shall request and obtain SCWA's acceptance of assisting with implementing the mitigation described below. If SCWA does not accept, the Project shall obtain CDFW's written approval of an alternative mitigation plan prior to Project construction.

Develop and implement a scientific study in coordination with SCWA to actively relocate the impacted owls to suitable habitat, upon CDFW written

approval. Alternatively, at the discretion of CDFW based on potential conserved and managed habitat near the impact site and the best available science, a passive relocation assessment shall be prepared to determine if passive relocation is preferable, in which case a passive relocation plan following CDFW's 2012 *Staff Report on Burrowing Owl Mitigation Appendix E* shall be submitted to and accepted by CDFW and implemented. CDFW's recommendations shall be implemented as feasible, as determined by the lead agency. The passive relocation plan shall include but not be limited to monitoring of the relocated owls for a minimum of two years.

Additionally, The Project shall pay to SCWA a Burrowing Owl Protection Fee, in an amount approved in writing by CDFW, prior to Project construction to fund:

i. Expansion of burrowing owl breeding or wintering habitat sufficient to achieve two nest or wintering sites for each nest or wintering site impacted. If owls are relocated, habitat expansion shall include the relocation site. If owls are not relocated or they are passively relocated onto conserved land unrelated to the Project impact, habitat expansion shall occur within the draft Solano HCP Reserve System. Habitat expansion shall target areas expanding existing conserved habitat occupied by burrowing owls, as feasible. Each nest or wintering site shall include a minimum of three suitable burrows with sufficient foraging habitat. Habitat expansion locations and acreages, and the suitability of burrows, must be reviewed and accepted by CDFW.

ii. Development and implementation of a CDFW-approved habitat expansion plan including an in-perpetuity long-term management plan and implementation funding.

iii. A contingency plan to develop and implement habitat enhancement on conserved land occupied by burrowing owls that is unrelated to the Project.

Active relocation and habitat expansion shall be implemented by SCWA qualified biologists and habitat expansion shall be completed within 18 months of the initiation of Project construction, unless otherwise approved in writing by CDFW, or SCWA shall provide the full Burrowing Owl Protection Fee paid by the Project for habitat expansion to another entity approved in writing by CDFW who can implement the habitat expansion. The habitat expansion plan shall include, but is not limited to: (1) installing artificial burrows following a design approved by CDFW, unless sufficient natural burrows are available, (2) incorporation of conspecific cues to attract

burrowing owls such as acoustic playback of owl calls and imitation of whitewash, (3) a California ground squirrel assessment and plan to increase populations if necessary, (4) a predator control plan including an assessment of feral cats and other potential burrowing owl predators, and reducing these threats by, for example, humanely removing feral cats or avian predators' hunting perches, (5) vegetation height and thatch reduction through mowing or grazing, and (6) an assessment of burrowing owl prey availability and plan to increase prey if necessary. The long-term management plan shall include, but is not limited to: artificial burrow maintenance twice annually in September and January and ongoing maintenance of conspecific cues, California ground squirrel assessment and management, predator control, vegetation management, prey availability assessment and management, and adaptive management.

Habitat enhancement on conserved land occupied by burrowing owls that is unrelated to the Project impact will be implemented by SCWA. A habitat enhancement plan shall be prepared and implemented with CDFW approval. The plan may include but is not limited to items 1-6 above. The plan must demonstrate compatibility with the conserved land requirements and constraints including but not limited to landowner permission, conservation easements, and management plans.

Please see **Attachment A** for a flowchart illustrating Mitigation Measure 1(c).

Please be advised that if SCWA assists with implementing this mitigation measure pursuant to the draft Solano HCP, the occupancy targets in the burrowing owl conservation strategy CDFW provided to SCWA on December 7, 2020, or revised targets based on current information developed in coordination with CDFW, must be met for continued impacts to burrowing owls following each target.

Mitigation Measure 2. Burrowing owl surveys and avoidance: Prior to Project activities, a qualified biologist shall conduct a survey pursuant to the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012 Staff Report); the proposed survey dates shall be approved by CDFW. Surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted commensurate with the type of disturbance anticipated up to 500 meters or 1,640 feet, as outlined in the CDFW 2012 Staff Report, and include burrow surrogates such as culverts, piles of concrete or rubble, and other non-natural features, in addition to burrows and mounds. Time lapses between surveys or Project activities shall trigger subsequent surveys, as determined by a qualified biologist, including but not limited to a final survey within 24 hours prior to ground disturbance. Surveys shall occur <u>each year of Project construction during burrowing owl</u>

breeding and wintering seasons if there is suitable habitat on or adjacent to the Project site (within up to 1,640 feet) where owls could be disturbed, as determined by a qualified biologist. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected nesting burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report unless otherwise approved in writing by CDFW, and any passive relocation plan for non-nesting owls shall be subject to CDFW review.

Comment 4: Special status bats, EIR Page 4-29

CDFW appreciates that the EIR includes protections for pallid bat (*Antrozous pallidus*) and western red bat (*Lasiurus blossevillii*), both SSC. We recommend replacing MM BIO-9 with the following more detailed mitigation measure to reduce potential impacts to special-status bats to less-than-significant.

MM BIO-9: Bat tree habitat assessment and surveys: Prior to any tree removal, a qualified biologist shall conduct a habitat assessment for bats. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, exfoliating bark, and suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked and tree trimming or removal shall not proceed unless the following occurs: a) in trees with suitable habitat, presence of bats is presumed, or documented during the surveys described below, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist conducts night emergence surveys or completes a visual examination of roost features that establish absence of roosting bats.

Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only; limbs with cavities, crevices or deep bark fissures shall be avoided; and 2) the second day the entire tree shall be removed.

Comment 5: Valley elderberry longhorn beetle, EIR Page 4-28

CDFW appreciates that the EIR includes protections for valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*), a threatened species under the federal Endangered Species Act. We recommend incorporating the following language into MM BIO-7 to reduce potential impacts to VELB to less-than-significant.

MM BIO-7: A qualified biologist shall evaluate the habitat for VELB following the USFWS 2017 *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (see: https://www.fws.gov/media/framework-assessing-impacts-valley-elderberry-longhorn-beetle). Project activities shall avoid elderberry plants (*Sambucus* spp.) and a 165-foot buffer around each plant. Elderberry plants and the 165-foot avoidance buffer shall be clearly flagged prior to Project activities. If Project activities must occur within 165 feet of an elderberry plant, the Permittee shall consult with USFWS pursuant to the federal Endangered Species Act.

IV. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Mitigation Measures

Comment 6: Nesting birds, EIR Page 4-32

CDFW appreciates that the EIR includes protections for nesting birds. We recommend revising MM BIO-12 to require nesting bird surveys within a minimum of 500 feet of the Project site and if there is a lapse in Project construction of seven days or longer, another survey shall be performed.

Please be advised that an LSA Agreement obtained for this Project would likely require the above recommended mitigation measures, as applicable.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)).

Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB online field survey form and other methods for submitting data can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plantsand-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination

by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the EIR to assist the City in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov or (707) 210-4415; or Craig Weightman, Environmental Program Manager, at (707) 339-1332 or Craig.Weightman@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment A: Mitigation Measure 1(c) Flow Chart

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2019049003)

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Attachment A. Mitigation Measure 1.c Flow Chart