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November 24, 2020

Governor's Office of Planning & Research

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Nov 25 2020

STATE CLEARINGHOUSE

Subject: Tentative Tract Map No. 61921, Revised Mitigated Negative Declaration, SCH #2020090306, City of Lancaster, Los Angeles County

Dear Ms. Swain:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Revised Mitigated Negative Declaration (MND) for the Tentative Tract Map No. 61921 Project (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 et seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 2 of 23

Project Description and Summary

Objective: The City of Lancaster (City; Lead Agency) and Royal Investors Group, LLC (Project Applicant) are proposing the Tentative Tract Map Number 61921 Project (Project). The Project would subdivide 20 acres of undeveloped land into 70 single family residential lots. Lot sizes within the development would range from 7,800 to 10,909 square feet. The streets within the subdivision would be public. A meandering sidewalk would be provided along Avenue J and 40th Street West. Landscaping would be provided along the perimeter of the subdivision and in the front yards of the individual lots.

Location: The Project is proposed for a 20-acre area in the central portion of the City in an area that is developing. The Project is located east of 40th Street West and north of Avenue J. Assessor's Parcel Numbers (APNs) associated with the Project include APN 3153-011-36 and APN 3153-011-43. The property to the east and south of the Project is developed with single family residential subdivisions. The area north of the Project is partially developed with a fire station and partially vacant. The property to the west is currently vacant; however, a portion of the property has an approved tentative map which has not been developed.

Comments and Recommendations

CDFW submitted comments for the Project on October 12, 2020. CDFW recommended measures to mitigate the Project's potential impacts on western Joshua tree (*Yucca brevifolia*), Crotch's bumble bee (*Bombus crotchii*), Swainson's hawk (*Buteo swainsoni*), burrowing owl (*Athene cunicularia*), alkali mariposa lily (*Calochortus striatus*), northern California legless lizard (*Anniella pulchra*), nesting birds, sensitive vegetation communities, and streams. CDFW also commented on the City's fee-based mitigation program whereby new land development projects are subject to payment of a \$770/acre Biological Impact Fee (regardless of the resources found on a project site) and if applicable, a \$2,405/acre alkali mariposa impact fee. CDFW was concerned about the sufficiency of both fees to mitigate for permanent and temporal impacts to fish and wildlife (biological) resources. CDFW discussed these comments with the City on Tuesday, November 3, 2020. CDFW appreciates that the City has been open to dialog and coordination with CDFW in reviewing the Project. CDFW also appreciates that the City has considered some of our previous comments in revising the Project's environmental document.

CDFW offers the comments and recommendations below to assist the City in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources. Editorial comments or other suggestions are also be included to improve the environmental document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

Specific Comments

Comment #1: Impacts to Western Joshua tree

Issue: The Project would require removal of six western Joshua trees, a CESA-listed candidate species. The MND states that Project-related impacts to western Joshua trees are unavoidable.

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 3 of 23

Specific Impacts: The Project as proposed would result in the loss of six western Joshua trees and its seed bank. Moreover, the Project would pave over soils that could potentially support the yucca moth (*Tegeticula synthetica*).

Why impacts would occur: The Project would require the removal of six western Joshua trees. Paving over the Project site may result in permanent loss of seeds buried by abiotic processes and seed caches made by rodents (Waitman et al. 2010). Local extirpation of western Joshua trees may also occur in the absence of a seed source that could be dispersed to adjacent areas. Lastly, the Project would pave over soils that may otherwise support the yucca moth's pupal stage. After feeding on fruits, yucca moth caterpillars drop onto the soil and retreat to pupate underground (Baker 1986; Bogler 1995). The yucca moth is the sole pollinator of western Joshua trees. Fruit and seed production of western Joshua trees fluctuate yearly depending on factors that include availability of pollinators (Sirchia et al. 2018). Regional collapses of yucca moth populations have led to complete failure of fruit production in the closely related banana yucca (*Y. baccatta*) in the Mojave Desert (St. Clair and Hoines 2018).

Evidence impacts would be significant: The western Joshua tree is a geographically and morphologically distinct species from the eastern Joshua tree (*Y. jaegeriana*) (Sirchia et al. 2018). The western Joshua tree has specific habitat requirements, which in turn restricts the range of the species (Center for Biological Diversity 2019). Currently, western Joshua trees are found in Joshua Tree National Park, northern slopes of the San Bernardino and San Gabriel Mountains, Antelope Valley, eastern flanks of the southern Sierra Nevada mountains, and the edges of Death Valley National Park (Center for Biological Diversity 2019). Recent studies have indicated that the species' range is contracting at lower elevations, recruitment is limited, and mortality is increasing. These trends are driven by the collective pressures of habitat loss, increased fire frequency and intensity, poorly regulated ground-disturbing activities, and climate change (Center for Biological Diversity 2019). One-third of suitable habitat for the western Joshua tree in California may be lost due to development over the coming decades, including over 40 percent of habitat in the species' southern California region. At this rate, western Joshua tree may be extirpated from all or most of California by the end of the century (Center for Biological Diversity 2019).

On November 1, 2019, CDFW accepted a petition for western Joshua tree as a threatened species for listing under the CESA (CDFW 2020a). CDFW determined that listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process (CDFW 2020a). On September 22, 2020, the California Fish and Game Commission determined that listing western Joshua tree as threatened under CESA may be warranted (CDFW 2020b). As a CESA candidate species, western Joshua tree is granted full protection of a threatened species under CESA.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW concurs with the Project's proposed Mitigation Measure 1 which requires a detailed survey of western Joshua trees on the Project site. Prior to Project-related ground-disturbing activities and the City's issuance of any grading permits, CDFW recommends that a detailed survey for western Joshua trees on the Project site be conducted as follows:

- 1) The survey should be conducted by a qualified botanist knowledgeable of western Joshua tree ecology;

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 4 of 23

- 2) The qualified botanist should map all western Joshua trees within the Project site and a 500-foot buffer from proposed Project construction and activities, including all staging areas, vehicle and worker parking areas, ingress and egress routes, and areas subject to Project-related ground-disturbing activities;
- 3) The survey should be conducted by walking transect surveys so that 100 percent visual coverage of Project site is achieved; and,
- 4) For each western Joshua tree, the qualified botanist should approximate the tree's height (feet) and measure the diameter of the main stout stem or trunk (inches).

A survey report should provide the following information:

- 1) The name(s) and affiliation of the qualified biologist(s) who conducted the survey;
- 2) The date(s) of the survey;
- 3) A map showing the Project site, 500-foot buffer, areas subject to Project-related ground-disturbing activities, surveyor(s) track lines, and distance between transects. The map should be produced using clear and recent aerial imagery;
- 4) A map showing the number and location of each western Joshua tree. Each western Joshua tree should be displayed as a point feature. Each point should be labeled with a unique identification code (i.e., number, letter);
- 5) A table listing each western Joshua tree and the corresponding tree's approximate height and main stout stem or trunk diameter; and,
- 6) Photographs of the Project site, including a minimum two photographs per acre depicting different aspects, and a clear photograph documenting each western Joshua tree.

The report should be submitted to CDFW for review and commenting prior to any Project-related ground-disturbing activities and the City's issuance of any grading permits.

Mitigation Measure #2: CDFW concurs with the Project's proposed Mitigation Measure 2 which requires consultation with CDFW to determine if a CESA Incidental Take Permit (ITP) is required (pursuant to Fish & Game Code, section 2080 *et seq.*). The City must consult with CDFW prior to any Project-related ground-disturbing activities and the City's issuance of any grading permits. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

Comment #2: Impacts to Crotch's bumble bee

Issue: The City concluded that the Crotch's bumble bee, a CESA-listed candidate species, is unlikely to occur on the Project site; therefore, impacts are not anticipated, and no mitigation measures are required. CDFW is concerned that a survey by a qualified entomologist has not been performed to unequivocally conclude that the species is absent.

Specific impact: The Project may impact Crotch's bumble bees, causing the injury or mortality of adults, eggs, and larvae, burrow collapse, nest abandonment, and reduced nest success. Permanent loss of colonies and suitable nesting habitat may result. The Project may eliminate native vegetation that may support suitable foraging habitat for Crotch's bumble bees adjacent to the Project site.

Why impacts would occur: Crotch's bumble bee could occur within or adjacent to the Project site. A review of the California Natural Diversity Database (CNDDDB) shows an occurrence of

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 5 of 23

Crotch's bumble bee containing the Project site. The CNDDDB occurrence suggests that 1) Crotch's bumble bee can occur in the Antelope Valley; 2) the Project site could support Crotch's bumble bee; and 3) areas adjacent to the Project site could support Crotch's bumble bee. The Project site contains 20 acres of undeveloped land with suitable habitat that could support Crotch's bumble bee. Suitable habitat includes areas of grasslands and scrub that contain requisite habitat elements such as small mammal burrows.

In addition, according to the Biological Resources Assessment, bees were documented in the Project site. Impacts to bees, potentially Crotch's bumble bees (if identified), could occur from ground disturbance and vegetation removal associated with Project implementation. Moreover, impacts to Crotch's bumble bees in adjacent areas could occur as a result of Project implementation. The Biological Resources Assessment was only performed within the Project's 20-acre development footprint without surveying a 500-foot buffer around the Project site. The Project could have direct or indirect impacts to Crotch's bumble bees not previously known to occur.

Evidence impact would be significant: On June 12, 2019, the California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. There is one historic occurrence of Crotch's bumble bee around the Project site. Until recently, focused surveys for Crotch's bumble bee were not required for projects. Therefore, the lack of current CNDDDB records of Crotch's bumble bee is likely due to an absence of focused surveys. The City has not performed species-specific surveys to conclude that Crotch's bumble bee is absent from areas within and adjacent to the Project site, which would provide substantial evidence on the record that no mitigation measures are required. Impacts to a species not previously known to occur within the Project site and adjacent areas could occur. The Project has a potential to substantially reduce and adversely modify habitat for Crotch's bumble bee, reduce and potentially seriously impair the viability of populations of Crotch's bumble bee, and reduce the number and range of the species while taking into account the likelihood that special status species on adjacent and nearby natural lands rely upon the habitat that occurs on the proposed Project site. Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Due to suitable habitat within the Project site, within one year prior to vegetation removal and/or grading, CDFW recommends that a qualified entomologist familiar with Crotch's bumble bee behavior and life history should conduct surveys to determine the presence/absence of Crotch's bumble bee. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Surveys should be conducted within the Project site and areas adjacent to the Project site where suitable habitat exists. Survey results including negative findings should be submitted to CDFW prior to Project-related vegetation removal and/or ground-disturbing activities.

Mitigation Measure #2: If a qualified entomologist determines Crotch's bumble bee is present and if "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 6 of 23

activities or over the life of the Project, the City must consult CDFW to determine if a CESA Incidental Take Permit is required (pursuant to Fish & Game Code, section 2080 *et seq.*)

Comment #3: Impacts to Swainson's Hawk

Issue: The City concluded impacts to Swainson's hawk, a CESA-listed threatened species, are not anticipated, or considered likely. CDFW is concerned that 1) the Biological Resources Assessment could have resulted in missed detections of Swainson's hawk and 2) permanent loss of suitable foraging habitat may not be mitigated.

Specific Impacts: The Project may impact Swainson's hawks nesting sites adjacent to the Project site not previously known to occur. The Project will develop 20 acres of land, resulting in a permanent loss of foraging habitat for Swainson's hawk.

Why impacts would occur: The Project could have impacts on Swainson's hawk if surveys performed resulted in missed detections of Swainson's hawks. According to established protocol for the Swainson's hawk, Swainson's hawks should be surveyed at least three times between April 1 through July 15 (CDFW 2010). The Biological Resources Assessment was performed on January 21, 2019 and July 29, 2019, which was either prior to or only once during the survey period.

Swainson's hawks are known to nest in ornamental trees along roadsides and in residential and commercial neighborhoods. Ornamental trees are located adjacent to the Project boundary along West Avenue J. Additionally, a small grove of trees is located 100 feet from the Project boundary at the intersection of 40th Street West and Newgrove Street. Trees adjacent to the Project site may not have been surveyed directly for potential Swainson's hawks, especially if the Biological Resources Assessment only surveyed within the Project's development footprint. These trees (potential nest territories) are adjacent to potential Swainson's hawk foraging habitat. The Project site provides habitat for small prey mammals such as the California ground squirrel (*Citellus beecheyi*), pocket gophers (*Thomomys bottae*), desert cottontail (*Sylvilagus auduboni*), and black-tailed jackrabbit (*Lepus californicus*).

Construction during the breeding season for nesting raptors could result in the reproductive suppression or nest abandonment, causing the loss of fertile eggs or nestlings. Impacts could result from noise disturbances and increased human activity, ingress/egress of construction equipment and vehicles, dust, ground-disturbing activities (e.g., staging, access, excavation, grading), and vibrations caused by heavy equipment. The Project may likely result in the loss of Swainson's hawk foraging habitat.

Evidence impacts would be significant: Consistent with CEQA Guidelines, section 15380, the status of Swainson's hawk as a threatened species under CESA qualifies it as an endangered, rare, or threatened species under CEQA. Project impacts would potentially reduce the number and/or restrict the range of the Swainson's hawk or contribute to the abandonment of an active nest and/or loss of significant foraging habitat for a given nest territory. This would result in "take" as defined under CEQA.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Prior to Project-related ground-disturbing activities and the City's

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 7 of 23

issuance of any grading permits, CDFW recommends conducting focused surveys for Swainson's hawk following the 2010 [Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California](#) (CDFW 2010). Surveys should be conducted by a qualified raptor biologist with Swainson's hawk survey experience. Surveys should include ornamental trees adjacent to the Project site along West Avenue J and 40th Street West. If Swainson's hawk is detected, CDFW recommends the City avoid impacts to Swainson's hawk and report the detection to CDFW.

Mitigation Measure #2: If Swainson's hawk is detected and if "take" or adverse impacts to Swainson's hawk cannot be avoided either during Project activities or over the life of the Project, a CESA ITP would be required (pursuant to Fish & Game Code, section 2080 *et seq.*).

Mitigation Measure #3: Permanent impacts to foraging habitat for Swainson's hawk should be offset by participation in a mitigation bank. CDFW recommends that mitigation occur at a CDFW-approved bank. No less than 20 acres of habitat should be mitigated to offset 20 acres of land that will be developed. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to Project-related ground-disturbing activities.

Mitigation Measure #4: If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to Swainson's hawk, CDFW recommends setting aside no less than 20 acres of replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. Mitigation lands should be in the same watershed as the Project site and provide suitable habitat for Swainson's hawk. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A Swainson's hawk mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access, proposed land dedications, control of illegal dumping, water pollution, and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to Project-related ground-disturbing activities and the City's issuance of any grading permits.

Comment #4: Impacts to Alkali Mariposa Lily

Issue: According to the Biological Report, one alkali mariposa lily (*Calochortus striatus*) seed pod was observed within the western portion of the study site. CDFW is concerned that a viable population of alkali mariposa lilies consisting of more than one plant may be within the Project site. Accordingly, CDFW is concerned that the Project's proposed Mitigation Measure 3 to mitigate for impacts to alkali mariposa lily may not be sufficient to reduce impacts to less than significant.

Specific Impacts: Potential loss of a substantial population of alkali mariposa lily. This may result in a population decline of the species, or local extirpation of a sensitive or special status plant without appropriate mitigation.

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 8 of 23

Why impacts would occur:

Extirpation from Project site: The MND concludes that viable populations of alkali mariposa lily are not expected in the Project site. However, the extent of impacts to alkali mariposa lily may be more substantial than what was concluded. The Project site may support more than one plant, especially given the presence of suitable habitat (clay pans) in the western portion of the Project site. Botanical surveys were conducted outside the bloom period for alkali mariposa lily (typically April to June) and would not have maximized detection of alkali mariposa lily. A single survey in spring may not accurately capture rare population distribution and abundance because plants typically emerge at different times throughout its bloom period. Therefore, the Biological Resources Assessment may have underreported the abundance, distribution, and density of alkali mariposa lilies. Moreover, a large population of alkali mariposa lily may exist via underground bulbs than what could be detected via above-ground plant surveys (Miller et al. 2004). The Project may develop over a substantial population of alkali mariposa lily and result in permanent loss of a propagule source. The proposed Project may result in extirpation of alkali mariposa lily from the Project site.

Extirpation: Extirpation of alkali mariposa lily from neighboring parcels or from the City may result because of cumulative impacts from development. According to CDFW's [California Natural Diversity Database](#) (CNDDDB), there are 103 documented extant occurrences of alkali mariposa lily dated 1960 to present (CDFW 2020c). Many of these occurrences are located at the Kern/Los Angeles County border (see map in Appendix A). Of these 103 occurrences, nine occur within the City. These nine occurrences have already been developed or are threatened by future development. Additional undocumented/unreported populations of alkali mariposa lily, such as the one at this Project site, may be threatened by development. Collectively, this Project and other proposed projects in the City could result in the extirpation of the species from within the City boundary. Decline in the species' abundance, range, and distribution in the State may also occur.

Mitigation: The Project proposes to mitigate for impacts to mariposa lily by requiring plant or habitat mapping and a payment of \$2,405/acre of impact. Mitigation may be insufficient to replace individual plants impacted and habitat acres. As mitigation is currently proposed, in the event that a springtime survey cannot be performed, the City may defer to mapping suitable habitat only. Habitat mapping, followed by mitigation for only the habitat impacted, would not account for the permanent loss of individual alkali mariposa lilies. Therefore, the City's proposed mitigation may be insufficient to fully mitigate for Project's impact on individual plants.

The Project also proposes compensatory mitigation for impacts to alkali mariposa lily. A relatively low financial commitment of \$2,405 per acre may not provide enough funding for preservation, enhancement, restoration, or other mitigation activities to offset impacts to alkali mariposa lily. The MND states that the fee was based on land values from March 2006, more than a decade ago. Additionally, the MND states the fee "is utilized to acquire conservation habitat typical of the habitat in the Antelope Valley." Many rare plants are habitat specialists that require specific habitat conditions to exist and persist. For example, they may require a particular soil type, set of pollinators, mycorrhizal fungi, associate plant species, microclimate. Alkali mariposa lily requires specific soils found in clay pans and alkaline meadows. It is unclear how purchasing habitat as described, without specifications for purchasing habitat meeting alkali mariposa lily habitat requirements, would reduce impacts specifically to alkali mariposa lily

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 9 of 23

plants and habitat to less than significant. Furthermore, the City's possible delay in using fees to purchase habitat may result in the Project having prolonged temporal impacts on a rare plant.

Evidence impacts would be significant: Alkali mariposa lily has a California Rare Plant Rank (CRPR) of 1B.2. Plants with a CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing (CNPS 2020). Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). California Native Plant Society's (CNPS) [Rare Plant Ranks](#) page includes additional rank definitions (CNPS 2020). Impacts to special status plants should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: CDFW strongly recommends two additional season-appropriate, focused rare plant surveys to occur between April and June to sufficiently document the abundance and distribution of alkali mariposa lily and other rare plants that may be present. CDFW recommends the survey be performed by a qualified botanist with appropriate experience and knowledge of southern California flora and performed according to CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Surveys should be completed prior to Project-related ground-disturbing activities and the City's issuance of any grading permits.

Mitigation Measure #2: CDFW recommends the qualified botanist prepare a report summarizing survey methods and results. A final report should be submitted to CDFW for review prior to Project related ground-disturbing activities and the City's issuance of any grading permits. The survey report should provide the following information:

- 1) A description and map of the survey area. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys;
- 2) Field survey conditions that should include name(s) of qualified botanist(s) and brief qualifications, date and time of survey, survey duration, general weather conditions, survey goals, and species searched. The botanist should search for alkali mariposa lily and additional rare plant species that could be present but not previously detected. This should include Parry's spineflower (*Chorizanthe parryi* var. *parryi*) and Lancaster milkvetch (*Astragalus preussii* var. *laxiflorus*);
- 3) Map and quantify the total area of suitable rare plant habitat by species;
- 4) Map(s) showing the location of individual plants or populations by species, and number of plants or density of plants per square feet occurring at each location. Use appropriate symbology, text boxes, and other map elements to show and distinguish between species found and which plants/populations will be avoided versus impacted by Project

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 10 of 23

construction and activities that would require mitigation; and,

- 5) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

Mitigation Measure #3: CDFW recommends the City compensate for the loss of individual plants and associated habitat acres at a ratio of no less than 10:1. CDFW recommends 10:1 based on the rarity of alkali mariposa lily and risk of extirpation. CDFW recommends that mitigation occur at a CDFW-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to Project-related ground-disturbing activities and the City's issuance of any grading permits.

Mitigation Measure #4: If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to alkali mariposa lily and habitat, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands should be in the same watershed as the Project site and support clay pans and/or alkali meadows containing alkali mariposa lilies. The abundance of Catalina mariposa lilies and total habitat acreage within the mitigation lands should be no less than 10:1. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to Project-related ground-disturbing activities and the City's issuance of grading permits.

Recommendation: Prior to Project-related ground-disturbing activities, a qualified botanist familiar with southern California rare plants should collect all alkali mariposa lily bulbs within the Project site. CDFW recommends that alkali mariposa lily propagules collected be deposited as a Documented Conservation Seed Collection at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when propagules from a California Native Plant Society-ranked and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. Documented conservation collections are important for conserving rare plant genetic material in order to provide a source material for future restoration and recovery and protect against possible species extinction. The City should provide evidence of Documented Conservation Seed Collection to CDFW prior to Project-related ground-disturbing activities.

Comment #5: Impacts to Sensitive Vegetation Communities

Issue: Vegetation communities were not mapped. The Biological Report/Initial Study only states "the project site is characterized by heavily impacted saltbush scrub habitat."

Specific impacts: The Project could potentially result in the loss of a sensitive vegetation community not previously known or identified in the Project site.

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 11 of 23

Why impacts would occur: Project implementation includes development of 20 acres. This may result in permanent loss and potentially decline or local extirpation of a sensitive plant community.

Evidence impacts would be significant: CDFW considers plant communities, alliances, and associations with a statewide ranking of S1, S2, S3, and S4 as sensitive and declining at the local and regional level (Sawyer et al. 2008). An S3 ranking indicates there are 21 to 80 occurrences of this community in existence in California, S2 has 6 to 20 occurrences, and S1 has less than 6 occurrences. Impacts to sensitive vegetation communities should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative 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.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: CDFW recommends mapping vegetation communities. Surveys should be conducted by a qualified botanist with appropriate experience and knowledge of southern California flora. Surveys should follow CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Surveys should be completed prior to Project-related ground-disturbing activities and the City's issuance of grading permits.

Mitigation Measure #2: If sensitive vegetation communities are identified and the Project cannot feasibly avoid impacts to sensitive vegetation communities, either during Project activities or over the life of the Project, the City should mitigate for impacts at no less than 5:1 for impacts to S3 ranked communities and 7:1 for S2 communities [see Comment #4 (Impacts to Alkali Mariposa Lily), Mitigation Measure #3, #4].

Recommendation: In 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the state (Fish & G. Code, § 1940). This standard complies with the National Vegetation Classification System, which utilizes alliance and association-based classification of unique vegetation stands. CDFW utilizes vegetation descriptions found in the [Manual of California Vegetation](#) (MCV) (Sawyer et al. 2009). To determine the rarity ranking of vegetation communities on the Project site, the MCV alliance/association community names should be provided as CDFW only tracks rare natural communities using this classification system. This would allow CDFW to appropriately comment on potential impacts to sensitive plants and vegetation communities.

Additional Recommendations

Burrowing Owl. CDFW recommends that protocol surveys (as proposed in the MND under Mitigation Measure 4) be performed prior to the City's issuance of any grading permits instead of 14 days prior to Project construction. Also, CDFW recommends that permanent impacts to burrowing owl habitat should be offset by participation in a mitigation bank or setting aside replacement habitat. See Comment #3 (Impacts to Swainson's hawk) and CDFW's comments from October 12, 2020.

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 12 of 23

Lake and Streambed Alteration Agreement (LSAA). CDFW concurs with the Project's proposed Mitigation Measure 7, which will require notification to CDFW pursuant to Fish and Game Code, section 1600 *et seq.* See CDFW's comments from October 12, 2020 for notification details and requirements.

Nesting Birds. CDFW is concerned that the Project's proposed mitigation measure may not fully mitigate for impacts to nesting birds. CDFW recommends the City consider including measures to minimize impacts recommended in CDFW's comments from October 12, 2020.

Mitigation Payment. CDFW appreciates that the City has provided additional information on the background, acquisition, and application of mitigation fees. The MND states that the \$770/acre Biological Impact Fee and \$2,405/acre alkali mariposa lily fee was based on land values in 2005 and 2006, respectively. The MND also states that "the City has funded the acquisition of over 800 acres of property which have been placed under conservation easements. This property contains plant and animal species and/or habitat which are typical of the Antelope Valley. The property acquired has been adjacent to the California Poppy Reserve, Ripley State Park, connected to the Los Angeles National Forest, and north of Edwards Air Force Base." CDFW welcomes continued dialogue with the City to discuss the application of the City's fees. In the event that these funds are held and used only when a large amount is accrued, CDFW would like to discuss with the City about the potential for prolonged temporal loss of habitat for sensitive and special status species impacted by this Project. Prior to finalizing the MND, CDFW recommends the City fully disclose the timeline for when fees are paid and used to purchase property for mitigation. CDFW also recommends the City discuss whether withholding fees could result in temporal loss of habitat.

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 detected by completing and submitting [CNDDB Field Survey Forms](#) (CDFW 2020d). This includes all documented occurrences of Crotch's bumble bee, Swainson's hawk, burrowing owl, and northern California legless lizard. The City should ensure the data has been properly submitted, with all data fields applicable filled out, prior to Project ground-disturbing activities and issuance of grading permits. The data entry should also list pending development as a threat and then update reported occurrences after impacts have occurred. The City should provide CDFW with confirmation of data submittal.

Mitigation Measures and Monitoring Reporting Plan. CDFW recommends that the City update the Project's proposed Mitigation Measures 1 through 8 per our comments and recommendations. Final Project mitigation measures should not result in prolonged temporal loss of habitat. Accordingly, CDFW recommends the City propose/modify mitigation measures so that mitigation may occur closer to the time of impacts/development (avoid or reduce temporal loss/impacts). CDFW provides comments to assist the City in developing mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The City is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided the City with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 13 of 23

A). A final MMRP shall reflect the Project's final on and/or off-site mitigation plans.

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 City of Lancaster 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

We appreciate the opportunity to comment on the Project to assist the City of Lancaster in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the City of Lancaster has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Erinn Wilson-Olgin
Environmental Program Manager I

Ec: CDFW

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Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 14 of 23

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State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM)/Recommendation (REC)		Timing	Responsible Party
MM-BIO-1- Impacts to Western Joshua Tree – survey and report	<p>Prior to Project-related ground-disturbing activities and the City’s issuance of any grading permits, a detailed survey of western Joshua trees on the Project site shall be conducted as follows:</p> <ol style="list-style-type: none"> 1) The survey shall be conducted by a qualified botanist knowledgeable of western Joshua tree ecology; 2) The qualified botanist shall map all western Joshua trees within the Project site and a 500-foot buffer from proposed Project construction and activities, including all staging areas, vehicle and worker parking areas, ingress and egress routes, and areas subject to Project-related ground-disturbing activities; 3) The survey shall be conducted by walking transect surveys so that 100 percent visual coverage of Project site is achieved; and, 4) For each western Joshua tree, the qualified botanist shall approximate the tree’s height (feet) and measure the diameter of the main stout stem or trunk (inches). <p>A survey report shall provide the following information:</p> <ol style="list-style-type: none"> 1) The name(s) and affiliation of the qualified biologist(s) who conducted the survey; 2) The date(s) of the survey; 3) A map showing the Project site, 500-foot buffer, areas 	<p>Prior to Project construction and activities</p>	<p>City of Lancaster (City)/Royal Investors Group, LLC</p>

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 16 of 23

	<p>subject to Project-related ground-disturbing activities, surveyor(s) track lines, and distance between transects. The map shall be produced using clear and recent aerial imagery;</p> <ol style="list-style-type: none"> 4) A map showing the number and location of each western Joshua tree. Each western Joshua tree shall be displayed as a point feature. Each point shall be labeled with a unique identification code (i.e., number, letter); 5) A table listing each western Joshua tree and the corresponding tree's approximate height and main stout stem or trunk diameter; and, 6) Photographs of the Project site, including a minimum two photographs per acre depicting different aspects, and a clear photograph documenting each western Joshua tree. <p>The report shall be submitted to CDFW for review and commenting prior to any Project-related ground-disturbing activities and the City's issuance of any grading permits.</p>		
MM-BIO-2- Impacts to Western Joshua Tree – permanent impacts/ITP	<p>If "take" or adverse impacts to western Joshua trees cannot be avoided during Project activities or over the life of the Project, the City must consult CDFW to determine if a CESA Incidental Take Permit is required prior to any Project-related ground-disturbing activities and the City's issuance of any grading permits.</p>	Prior to Project construction and activities	City/Royal Investors Group, LLC
MM-BIO-3- Impacts to Crotch's Bumble Bee - survey	<p>Due to suitable habitat within the Project site, within one year prior to vegetation removal and/or grading, a qualified entomologist familiar with Crotch's bumble bee behavior and life history shall conduct surveys to determine the presence/absence of Crotch's bumble bee. Surveys shall be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1. Surveys shall be conducted within the Project site and areas adjacent to the Project site where suitable habitat exists. Survey results including negative findings</p>	Prior to Project construction and activities	City/Royal Investors Group, LLC

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 17 of 23

	shall be submitted to CDFW prior to Project-related vegetation removal and/or ground-disturbing activities.		
MM-BIO-4- Impacts to Crotch's Bumble Bee - permanent impacts/ITP	If "take" or adverse impacts to Crotch's bumble bee cannot be avoided either during Project activities or over the life of the Project, the City must consult CDFW to determine if a CESA Incidental Take Permit is required.	Prior to Project construction and activities	City/Royal Investors Group, LLC
MM-BIO-5- Impacts to Swainson's Hawk - survey	Prior to Project-related ground-disturbing activities and the City's issuance of any grading permits, focused surveys for Swainson's hawk shall be conducted in accordance with the 2010 Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California . Surveys shall be conducted by a qualified raptor biologist with Swainson's hawk survey experience. Surveys shall include ornamental trees adjacent to the Project site along West Avenue J and 40 th Street West. If Swainson's hawk is detected, CDFW recommends the City avoid impacts to Swainson's hawk and report the detection to CDFW.	Prior to Project construction and activities	City/Royal Investors Group, LLC
MM-BIO-6- Impacts to Swainson's Hawk – permanent impacts/ITP	If "take" or adverse impacts to Swainson's hawk cannot be avoided either during Project activities or over the life of the Project a CESA Incidental Take Permit will be required.	Prior to Project construction and activities	City/Royal Investors Group, LLC
MM-BIO-7- Impacts to Swainson's Hawk – replacement habitat	Permanent impacts to foraging habitat for Swainson's hawk shall be offset by participation in a mitigation bank. Mitigation shall occur at a CDFW-approved bank. No less than 20 acres of habitat shall be mitigated to offset 20 acres of land that will be developed. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to Project-related ground-disturbing activities.	Prior to Project construction and activities	City/Royal Investors Group, LLC

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 18 of 23

<p>MM-BIO-8- Swainson's Hawk – replacement habitat</p>	<p>If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to Swainson's hawk, the City shall set aside no less than 20 acres of replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity. Mitigation lands shall be in the same watershed as the Project site and provide suitable habitat for Swainson's hawk. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A Swainson's hawk mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to Project-related ground-disturbing activities and the City's issuance of any grading permits.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>
<p>MM-BIO-9- Impacts to Alkali Mariposa Lily – survey</p>	<p>A qualified botanist with appropriate experience and knowledge of southern California flora shall perform two additional season-appropriate, focused rare plant surveys between April and June to sufficiently document the abundance and distribution of alkali mariposa lily and other rare plants that may be present. Surveys shall be performed according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Surveys shall be completed prior to implementing Project related ground-disturbing activities.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>
<p>MM-BIO-10- Impacts to Alkali Mariposa Lily – report</p>	<p>The qualified botanist shall prepare a report summarizing survey methods and results. A final report shall be submitted to CDFW for review prior to implementing Project related ground-disturbing activities and the City's issuance of any grading permits. The survey report shall provide the following information:</p> <ol style="list-style-type: none"> 1) A description and map of the survey area. The map shall show surveyor(s) track lines to document that the entire site was covered during field surveys; 2) Field survey conditions that shall include name(s) of qualified botanists(s) and brief qualifications, date and time of survey, survey duration, general weather conditions, 	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 19 of 23

	<p>survey goals, and species searched. The botanist shall search for alkali mariposa lily and additional rare plant species that could be present but not previously detect. This shall include Parry’s spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>) and Lancaster milkvetch (<i>Astragalus preussii</i> var. <i>laxiflorus</i>);</p> <p>3) Map and quantify the total area of suitable rare plant habitat by species;</p> <p>4) Map(s) showing the location of individual plants or populations by species, and number of plants or density of plants per square feet occurring at each location; and,</p> <p>5) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, shall include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).</p>		
<p>MM-BIO-11- Impacts to Alkali Mariposa Lily – replacement habitat</p>	<p>The City shall compensate for the loss of individual plants and associated habitat acres at a ratio of no less than 10:1. Mitigation shall occur at a CDFW-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to Project-related ground-disturbing activities and the City’s issuance of any grading permits.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 20 of 23

<p>MM-BIO-12- Impacts to Alkali Mariposa Lily – replacement habitat</p>	<p>If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to alkali mariposa lily and habitat, the City shall set aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands shall be in the same watershed as the Project site and support clay pans and/or alkali meadows containing alkali mariposa lilies. The abundance of Catalina mariposa lilies and total habitat acreage within the mitigation lands shall be no less than 10:1. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to Project-related ground-disturbing activities and the City's issuance of grading permits.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>
<p>MM-BIO-13- Impacts to Vegetation Communities – survey</p>	<p>A qualified botanist with appropriate experience and knowledge of southern California flora shall map vegetation communities. Surveys shall follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Surveys shall be completed prior to implementing Project related ground-disturbing activities.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>
<p>MM-BIO-14- Impacts to Vegetation Communities – replacement habitat</p>	<p>If sensitive vegetation communities are identified and the Project cannot feasibly avoid impacts to sensitive vegetation communities, either during Project activities or over the life of the Project, the City shall mitigate for impacts at no less than 5:1 for impacts to S3 ranked communities and 7:1 for S2 communities. See MM-BIO-11 and MM-BIO-12.</p>	<p>Prior to/During Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>
<p>REC-1-Alkali Mariposa Lily- seed collection</p>	<p>Prior to Project-related ground-disturbing activities, a qualified botanist familiar with southern California rare plants should collect all alkali mariposa lily bulbs within the Project site. Alkali mariposa lily propagules should be deposited as a Documented Conservation Seed Collection at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). The City should provide</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 21 of 23

	evidence of Documented Conservation Seed Collection to CDFW prior to Project-related ground-disturbing activities.		
REC-2-Vegetation Communities-vegetation mapping	To determine the rarity ranking of vegetation communities on the Project site, vegetation community names and descriptions found in the Manual of California Vegetation should be provided as CDFW only tracks rare natural communities using this classification system.	Prior to Project construction and activities	City/Royal Investors Group, LLC
REC-3-Impacts to Burrowing Owl	CDFW recommends that protocol surveys be performed prior to the City's issuance of any grading permits. Also, CDFW recommends that permanent impacts to burrowing owl habitat be offset by participation in a mitigation bank or setting aside replacement habitat. See Comment #3 (Impacts to Swainson's hawk) and CDFW's comments from October 12, 2020.	Prior to Project construction and activities	City/Royal Investors Group, LLC
REC-4-Impacts to Streams	CDFW shall be notified pursuant to Fish and Game Code, section 1600 <i>et seq.</i> See CDFW's comments from October 12, 2020.	Prior to Project construction and activities	City/Royal Investors Group, LLC
REC-5-Impacts to Nesting Birds	CDFW recommends the City consider including language and measures to minimize impacts to nesting birds as recommended in CDFW's comments from October 12, 2020.	Prior to/During Project construction and activities	City/Royal Investors Group, LLC
REC-6-Mitigation Payment	The City should continue to coordinate with CDFW to discuss the sufficiency of the \$770/acre Biological Impact Fee and \$2,405/acre alkali mariposa lily fee to mitigate impacts to biological resources below a level of significance.	Prior to Project construction and activities	City/Royal Investors Group, LLC
REC-7-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. The City should ensure that all data concerning special status species within the Project site be submitted to the CNDDDB by completing and submitting CNDDDB Field Survey Forms . This includes all documented occurrences of Crotch's bumble bee, Swainson's hawk, burrowing owl, and	Prior to Project construction and activities	City/Royal Investors Group, LLC

Ms. Jocelyn Swain
 City of Lancaster
 November 24, 2020
 Page 22 of 23

	<p>northern California legless lizard. The City should ensure the data has been properly submitted, with all data fields applicable filled out, prior to Project ground-disturbing activities and issuance of grading permits. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred. The City should provide CDFW with confirmation of data submittal.</p>		
<p>REC-8- Mitigation Monitoring and Reporting Plan</p>	<p>CDFW recommends that the City update the Project's proposed Mitigation Measures 1 through 8 per our comments and recommendations. Final Project mitigation measures should not result in prolonged temporal loss of habitat. Accordingly, CDFW recommends the City propose/modify mitigation measures so that mitigation may occur closer to the time of impacts/development (avoid or reduce temporal loss/impacts). The City should develop final and specific on- and/or off-site mitigation plans prior to finalizing the environmental document.</p>	<p>Prior to Project construction and activities</p>	<p>City/Royal Investors Group, LLC</p>

Ms. Jocelyn Swain
City of Lancaster
November 24, 2020
Page 23 of 23

Appendix A: Alkali mariposa lily (*Calochortus striatus*) occurrences in the California Natural Diversity Database (CNDDDB).

