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MEMORANDUM

Date: July 1, 2021
To: Mr. Jim Flagg
Organization: Alice Jo Meinhold Survivors Trust
From: Kevin Merk
Email: kmerk@kevinmerkassociates.com
cc: Katie Rollins, Cannon
Re: Westmont Avenue TTM 3157 – Response to Comments Regarding Biological Resources

During and following the Planning Commission hearing for the subject project, several comments related to biological resources were received from the public, and this memorandum addresses three topics of concern. Specifically, public comments raised concerns with the proposed project resulting in potential impacts to the California red-legged frog (*Rana draytonii*), the burrowing owl (*Athene cunicularia*), and the riparian and wildlife corridor along the existing creek. We provide the following information to direct you to the analysis provided in our Biological Resources Assessment (BRA) prepared for the project in August 2020 along with additional information as warranted.

California Red-legged Frog

The Biological Resources Assessment provided a characterization of the unnamed drainage feature that traverses the site, which is locally known as Twin Ridges Creek (refer to Section 3.2). This intermittent to ephemeral stream had a narrow channel with shallow, continuously flowing water at the time of the March 28, 2020 site visit and one small pool less than six (6) inches deep (KMA 2020). The channel morphology indicated that during years with higher rainfall, water would flow through the drainage without forming pools deep enough to support California red-legged frogs. No emergent vegetation was present, and wetland vegetation along the channel consisted of vernal marsh species, which indicated a lack of permanent inundation (refer to Section 3.4.3). The background review coupled with the field work conducted for the BRA (as well as our many years of experience working with this species) determined that the California red-legged frog was "unlikely" to occur on the property based on the lack of suitable habitat and separation from known breeding sites to the north (Appendix E, page E-10). It is important to note that breeding habitat is associated with still or slow moving water that is greater than two (2) feet deep surrounded by dense, shrubby riparian or emergent vegetation (USFWS, 2002; Hayes and Jennings, 1989). Typical breeding sites maintain deep pools at least into July (USFWS, 2002). Individuals may move through upland grasslands, coastal scrub and riparian areas during wet weather while foraging or moving between breeding ponds (USFWS, 2002). During dry periods, the frog is rarely encountered far from water.

The onsite drainage was considered to be unsuitable for California red-legged frogs, and the grassland and riparian habitats would be marginally suitable as upland and/or dispersal habitat, but only if there were aquatic sites with breeding populations within 1.0 mile that are not separated from the site by barriers to dispersal (BRA pages 25 and 29). The only recorded populations within the dispersal capabilities of the frog are on the north side of Highway 1, which is a barrier to movement. Additionally, the site is surrounded on three sides by dense urban development, and thus does not provide significant linkage to extensive open space to the south, east or west (BRA page 27).

A comment letter received by the City suggests that a "permanently wetted" branch of Twin Ridge Creek downstream from the project site may provide suitable habitat for the California red-legged frog. This branch is not mapped in the National Wetlands Inventory (BRA Figure 2), but it is identified as an intermittent stream on the 1965 San Luis Obispo U.S. Geological Survey topographic quadrangle. It originates on the east side of Bishop Peak and has a larger drainage area than the onsite creek segment. It appears that the reach of the drainage indicated as "Perennial Portion of Twin Ridges Creek" in the letter may be a remnant channel from the drainage's natural location. The City's (2014) *General Plan Conservation and Open Space Element*, Figure 9 Creeks and Wetlands, indicates that this branch was diverted from its former location to a culverted section along Westmont Avenue just upstream from the project site, which then empties into the onsite drainage along its northern boundary. Therefore, it appears that the flows from the drainage's headwaters were diverted away from the segment indicated on map provided. Aerial photography from Google Earth shows no channel or riparian habitat upstream from the indicated location because the area along and west of Jeffrey Avenue has been entirely developed. In addition, the hydrology of the drainage has been altered from its historic regime and now includes urban runoff and nuisance flows from residential irrigation and other uses.

The areas identified as "Perennial Portion of Twin Ridges Creek" were visited by KMA's principal biologist, Kevin Merk, on June 10, 2021. The drainage originated from a storm drain pipe below residential development, and had a small pool at the outfall (6 feet wide by 14 feet long and 4 inches deep). Based on evidence of past flow and channel morphology, the pool could reach a maximum depth of approximately 18 inches. Please refer to the Photo Plate provided below. Downstream from this area were two small pools formed by anthropogenic materials stacked in the channel, with water two (2) to three (3) inches deep (maximum size estimated at 3 feet by 5 feet and 6 inches deep; 2 feet by 3 feet and 4 inches deep). There was no flow between the pools. Residential structures were along the top of bank and the streambank below the homes was armored with stacked concrete sacks. Extensive cover of non-native English ivy occurred throughout the area. Sparse wetland plants were observed in the channel, and consisted of a small patch of sedges with taller riparian canopy cover comprised mostly of willows. This area would not be suitable for California red-legged frog breeding due to the small size of pools, insufficient water depth and lack of vegetation cover for protection.

This native amphibian needs deep enough water to dive into to escape predators such as raccoons and wading birds (USFWS, 2002; Jennings and Hayes, 1994). The non-native bullfrog is also a known predator of this species. When red-legged frog tadpoles are found in streams they are in large pools with emergent wetland plants, overhanging riparian vegetation in contact with the water or undercut banks that provide the necessary hiding places to avoid predation so they can develop into young adults (USFWS, 2002; KMA personal observation). Although water persisted in this small culvert outfall pool until June in a drought year, it is too shallow and limited in extent even at the estimated bank full stage to support California red-legged frog breeding requirements. The segment of the drainage on the project site and extending further upstream to another culverted section that daylights from under urban development along Skyline Drive naturally dries in the summer and does not have any in-channel pools with suitable depth to support red-legged frogs. Please note that the commenter identified this as the "spring origin", and it appears to be another outfall of the culverted creek that has become overgrown with weedy vegetation including several Canary Island palm trees. Additionally, there is no downstream

habitat for this species as Twin Ridges Creek goes into an open concrete channel downstream from Highland Drive (City 2014). Moreover, no records of California red-legged frogs are present from Stenner Creek or San Luis Obispo Creek within the downtown area where individuals could breed and disperse through the creek corridor onto the site (CDFW, 2021).

The entire project site falls within Unit SLO-3 of designated critical habitat for the California red-legged frog, which encompasses 116,517 acres. The BRA provides further detail in Section 3.6.4. However, the statement by a commenter that this stream in particular has been identified as red-legged frog habitat is incorrect. Based on our analysis, we concluded that the stream is too ephemeral and lacks any significant pools of sufficient depth to support adult frogs. If a known breeding site occurred nearby that was not separated from the property by a major barrier such as Highway 1, then it is possible that the drainage corridor could potentially be used by juvenile frogs during dispersal periods. However, no potential breeding sites were identified on or in close proximity to the property, and given the lack of suitable aquatic habitat in the drainage corridor, we concluded there was very low potential for a red-legged frog to disperse through the creek corridor. Please also refer to Appendix E in the BRA for additional information.

Burrowing Owl

The burrowing owl (*Athene cunicularia*), a California Department of Fish and Wildlife Species of Special Concern, was determined to have potential to occur onsite as an uncommon transient that could move through the area during the winter months due to the proximity of large grassland habitats to the north where this species has been observed. A species account and details on the evaluation of occurrence is provided on page 20 of the BRA. Burrowing owls are rare in the coastal San Luis Obispo area, and are believed to no longer nest in this region (CDFW, 2003). As detailed in the BRA, the site is highly manipulated from years of human occupation, and the onsite grassland areas are used regularly for horses and are mowed and managed. These activities and proximity to existing development reduces the potential for a burrowing owl to fly through the area and stop over at the site. This species is very sensitive to human activity and the proximity of the site to dense urban development in the city further reduces the habitat value for this species, especially considering the extensive grasslands to the north along Highway 1. While some ground squirrel activity was noted onsite and in the immediate area, no extensive burrow complexes were observed that would potentially draw a burrowing owl to the site to forage considering the expansive grassland habitat available to the north outside the city limits. Potential project impacts on burrowing owl were identified in Impact Bio-2 of the BRA, and mitigation provided to make sure the project avoids impacts to this species just in case one occurred onsite prior to project activities (refer to Mitigation Measures BIO-2a and -2b). The mitigation measures require pre-construction surveys to ensure no burrowing owls are in close proximity to any construction activity. If an owl or an occupied burrow(s) is located, the area will be left alone until the bird leaves the area. Because the site is small, surrounded by trees and has regular human presence, the loss of the disturbed grassland habitat as a result of the project would not have an effect on the regional population of burrowing owls.

Riparian and Wildlife Corridor

Comments were received concerned that the removal of large eucalyptus, redwood and other trees along the riparian zone would decrease roosting habitat for raptors. The project proposes only to remove non-native species from the riparian corridor and this activity is recommended by the project's Fire Protection Plan to reduce fuel loads. Please note that the redwood trees in the riparian corridor would not be removed, and only the eucalyptus and acacia trees would be removed as part of the habitat enhancement effort. The effects of these actions are described in Section 4.1.2 of the BRA. Areas where non-native trees are to be removed and other locations within the creek setback area would be designated as open

space and would receive native tree, shrub and grass plantings and protected through a deed restriction or other mechanism (Mitigation Measure BIO-4b). Therefore, the loss of roosting habitat if the one eucalyptus (#114) is removed would be temporary and the habitat condition of the riparian corridor will overtime be better by planting native species and increasing the overall area that is occupied by native riparian habitat. The onsite grassland area is disturbed and does not represent high quality foraging habitat given its limited area and proximity to existing urban development. Birds of prey such as hawks and great horned owls would still be able to utilize trees along the riparian corridor and in the surrounding area for perches even with the development of the proposed project.

The project proponent understands the importance of maintaining open space adjacent to the riparian area and creek. This has been addressed by incorporating a voluntary 20-foot setback from the riparian area that will be enhanced through non-native species removal and replanting with native trees, shrubs and grasses. The creek corridor will be protected from human disturbance, as described in the Project Description, Section 1.1 and Mitigation Measure BIO-4b #7. As described in Section 4.1.4, the property away from the creek corridor does not provide linkage to other suitable habitat areas because it is surrounded on three sides by urban development, but it can be used as a stopover point by wildlife species that are somewhat adapted to human development. Biological monitoring to ensure protection of the setback area during the construction phases has been provided in Mitigation Measure BIO-4b #4, and any proposed habitat enhancement or mitigations associated with future drainage improvements would also be managed and monitored for a period after development to ensure the replaced vegetation is established and self-sustaining. It is envisioned that the wildlife (i.e., deer, opossum, raccoon) that currently use the creek corridor will continue to use it post-development, as it connects with undeveloped lands to the north. As proposed, the habitat enhancement methods within the riparian corridor (i.e., removal of non-native species and replanting with natives) will increase the value of this portion of the site, and maintain it as a wildlife corridor connecting areas to the north with habitat features to the south of the property.

Literature Cited

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- Kevin Merk Associates, LLC (KMA). 2020 (August 17). Biological Resources Assessment for 468 Westmont Avenue, San Luis Obispo, California (Assessor's Parcel Number 052-496-001). Prepared for Alice Jo Meinhold Survivors Trust, San Luis Obispo, California.
- U.S. Fish and Wildlife Service. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). U.S. Fish and Wildlife Service, Portland, Oregon. viii+173 pp.

Photo Plate



Photo 1. View of culvert outfall and stacked concrete bags below homes on Jeffrey Avenue with a small narrow pool of water approximately 4 inches deep.



Photo 2. View of narrow channel downstream of culvert outfall showing English ivy dominating the understory. A small pool only several inches deep can also be seen at the bottom of the photo.



Photo 3. Southerly view of drainage feature north of the site showing wetland vegetation in the channel surrounded by upland grassland. No in-stream pools suitable for red-legged frog breeding are present.



Photo 4. Northwesterly view of drainage feature emerging from under residences along Skyline Drive. It appeared that the outfall culvert was overgrown with several palms and other weedy vegetation.