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Thai-Chau Le, Environmental Project Manager City of San Jose 200 E. Santa Clara Street, 3rd Floor San Jose, CA 95113

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RE: Dove Hill Road Assisted Living Project

Dear Ms. Le,

I write to reply to responses on my comments on the biological resources assessment (H. T. Harvey & Associates) prepared for the mitigated negative declaration of the Dove Hill Road Assisted Living Project (City of San Jose 2018). My qualifications were summarized in my comment letter.

TRENDS IN RESPONSES

Preconstruction surveys avoid take

Multiple responses to my comments imply that project impacts can be avoided by performing preconstruction surveys, as if take is defined strictly as the killing of an animal. However, it is widely accepted in the field of wildlife ecology that habitat loss results in take regardless of whether animals are killed during construction or "saved" by preconstruction surveys. Habitat elsewhere is occupied already, leaving no place for project refugees to live. Displacement of animals is take. Worse, it is permanent take, meaning that all future generations of that species will have lost access to habitat that once occurred where the project was built. Preconstruction surveys might save a few individuals of a species from immediate death, but they cannot prevent the project from reducing the species' numerical capacity via habitat loss.

Compensatory mitigation is intended to offset these longer-term impacts that preconstruction surveys cannot address. Most of the special-status species potentially affected by the project (27 of 30 species in Table 1 of my comment letter) are not covered by the VHP, meaning that the fee provides no compensatory mitigation for any of them because habitat is unique to each species (Hall et al. 1997, Morrison et al. 1998). In the case of burrowing owls, it is by now obvious that the VHP mitigation fees either have been insufficient or misdirected. Relying on preconstruction surveys rather than detection surveys results in blindness to impacts at both the analysis and mitigation stages. One cannot determine levels of take from preconstruction surveys, nor can one assess the adequacy of the mitigation fee from such surveys.

Significance of impacts

Even more misleading is the respondents' repeated claim that significance of take is defined by population-level impacts or the loss of some (unstated) portion of the species' range. If the standard of significance is based on clear biological thresholds, then it would be standard practice to perform surveys that are appropriate for quantifying distribution and abundance. Otherwise, how could the respondents determine whether project impacts would cause substantial population declines or cause regional populations to drop below self-sustaining levels? If the respondents' standard was correct, then each project's impact assessment would need to define the demographic organization of each species at issue within the project area so that it could be determined whether the project would affect a portion of a population, the whole of a population, or multiple populations (Smallwood 2001). Decision-makers would indeed be better informed if such a standard existed, but it does not exist under CEQA. Nor was it anywhere close to having been achieved by the surveys serving as foundation for conclusions in the ISMND. Respondents cannot claim anything about the project's potential impacts on populations of any of the special-status species at issue, because the respondents lack the data needed to understand anything about the social organization of any wildlife species occurring on the proposed project site.

Special-Status Species Designations Carry No Formal Legal Status

In an attached document to the City of San Jose's responses, H. T. Harvey & Associates argue that designations of Species of Special Concern are mere administrative designations and do not carry any formal legal status. However, under CEQA Guidelines section 15065, a project's effects on biological resources are deemed significant where the project would ... "reduce the number or restrict the range of a rare or endangered plant or animal." What do the CEQA Guidelines mean by rare? CEQA Guidelines section 15065 provide some guidance on this question, such as when a project would "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 the California Department of Fish and Game or U.S. Fish and Wildlife Service." Species of Special Concern are special status species, and are so designated in CDFW regulations. Fully Protected Species are also special-status species. The reasons for the designations are explained, often in great detail, in CDFW publications. A good example can be found in the accounts of bird species of special concern (Shuford and Gardeli 2008).

REPLIES TO SPECIFIC RESPONSES

Response D17, part 1: "The Project site is not located within modeled occupied nesting habitat for the burrowing owl and therefore, mapping of burrows present on the site is not required under the VHP."

If mapping of burrows is not required, then no determination of the project's impacts on burrowing owls carries scientific validity. The VHP is not a free pass to rely on wishful speculation rather than established scientific protocol for determining a species presence/absence. The VHP gives neither H.T. Harvey & Associates nor City of San Jose license to imply that an adequate search turned up no sign of burrowing owls. Regardless of the coverage afforded by VHP, one cannot claim that cursory surveys are equivalent to CDFW's (2012) guidelines, nor can one claim that an absence determination carries the support of detection survey consistent with CDFW's (2012) guidelines. According to the CDFW's (2012) guidelines, nobody can determine burrowing owls absent from the proposed project site unless and until adequate detection surveys are performed.

Response D17, part 2: "...based on decades of experience performing surveys in the Project vicinity, we know that breeding burrowing owls have not been observed in the Project vicinity since the 1990s, and there is no expectation that burrowing owls currently breed on the Project site."

Given their decades of experience, then H.T. Harvey & Associates is aware that burrowing owls are nearly extirpated from the region. As of two years ago, breeding pairs in Santa Clara Valley numbered 37, and the situation is worse now. I was contacted twice this past breeding season by a biologist working on burrowing owls in Santa Clara Valley, and those contacts were not to report progress; quite the opposite. The VHP is obviously failing to conserve burrowing owls in Santa Clara Valley. And as I explained in my comments, distinguishing breeding habitat from foraging habitat falsely implies that burrowing owls can successfully breed without successfully foraging. Distinguishing habitat roles might be useful for narrowing an impact analysis to a smaller portion of the environment, but it does so by pretending that animals can breed in a state of starvation. Losing access to forage results directly in losing access to breeding opportunity.

Response D18: "...bats are assumed to occupy suitable habitat in the impact area, and mitigation measures to reduce impacts on bats to a less than significant level are provided based on the assumption that impacts could potentially occur."

Bats might be assumed present, but my comments addressed the ISMND's trivializing of the significance of project impacts and the inadequacy of proposed mitigation. Similar to the approach used for assessing project impacts to burrowing owls, the ISMND pigeonholed bat roosts to conveniently narrow portions of the environment (anthropogenic structures, in this case) and directed preconstruction surveys to that narrow environment. In my comments, I pointed out that appropriate survey methods would divulge which species of bats occur at the site and relative abundances.

Response D19: "The IS/MND analyzed the impacts on white-tailed kites, loggerhead shrikes, California tiger salamander, California red-legged frog, and other species that occur or may occur on the project site."

Respondents failed to respond to my comments related to white-tailed kites, loggerhead shrikes, California tiger salamander, California red-legged frog and other species. And again, they focused on breeding habitat, as if breeding habitat is all that matters to any of these species. California tiger salamanders and California red-legged frogs require

upland refugia, including those frogs and salamanders documented only short distances from the proposed project site. Without refugia for these species, and without foraging for the other species, there will be no breeding possible wherever it is they are breeding.

Response D20: "The proposed project would occur on only 3 acres of the 21-acre site."

The 3-acre project would cause more than 3 acres of impacts to special-status species of wildlife. Lighting, noise, and human activity would push sensitive species further back from the existing boundary between the Anthropocene and wildlife habitat. Car and truck traffic to and from the project would extend to the origins and destinations of that traffic. Birds from beyond those 3 acres would collide with windows within the 3 acres, and if cats are kept on site, then they would extend their depredations on wildlife well beyond the 3 acres. Every project proponent would argue that their project is only a small portion of the remaining open space, but cumulatively their projects, however small individually, have pushed many wildlife species to the brink of extirpation/extinction.

Response D21: "[California tiger] *Salamander and* [California red-legged] *frog breeding and upland habitat are not present on or immediately adjacent to the project site."*

Respondents attempt to confuse the issue by conflating the conclusion of the impacts analysis. The ISMND did not conclude absence of these species from upland habitat. Quite the opposite, actually (page 47): "The Habitat Plan maps the site as providing potential non-breeding habitat for the California tiger salamander and potential dispersal habitat for the California red-legged frog." Without having performed any type of survey suitable for detecting California tiger salamanders or California red-legged frogs in upland refugia, respondents cannot claim to know whether the site supports refugia for these species. Certainly California ground squirrel burrows are available as refugia, and certainly the Habitat Plan predicted the site potentially provides non-breeding habitat. Therefore, the reasonable determination is that the site potentially supports California tiger salamanders or California red-legged frogs.

Response D22: "As discussed in the Biotic Assessment prepared for the project (Appendix B of the IS/MND) and analyzed in the IS/MND, the project site is not located in an area that is particularly important for wildlife movement."

Absence of evidence is not evidence of absence. Contrary to what respondents might have us believe, there has been no systematic scientific survey effort to identify areas of particular importance to wildlife movement. Consistent with the precautionary principle in risk assessment (National Research Council 1986, O'Brien 2000), and with the spirit and intent of CEQA, the burden of proof is on the project proponent to analyze impacts and mitigate potential interference that the proponent's project might have on wildlife movement. Merely pointing to an absence of evidence of wildlife movement in the area is no analysis at all. An EIR is needed to address this potential impact.

Response D23: "...the vast majority of such species [killed by project-generated traffic] are expected to be common, urban-adapted species, and any increase in traffic associated with the proposed project is not expected to result in a substantial impact on the regional populations of these common wildlife species."

That the vast majority of road-killed wildlife will be common species is irrelevant. In my comments I identified particular threatened, endangered, and otherwise rare or sensitive species that are likely to be run over and killed by project-generated traffic. Respondents failed to address potential impacts to special-status species.

Respondents claim that the proposed project is not expected to cause substantial impacts to regional populations of common species, again ignoring my comments directed toward special-status species. However, as I commented on the ISMND, not one word was directed toward traffic-generated impacts on wildlife. There were no expectations of traffic impacts because there was no thought given to these impacts.

Contrary to the dismissal of impacts by respondents, traffic impacts have taken devastating tolls on wildlife across North America. In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally. Just across the Bay from the proposed project site, Mendelsohn et al. (2009) found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches for traffic-caused wildlife fatalities along a 2.5 mile stretch of Vasco Road in Contra Costa County, California. Adjusting this number for the proportion of fatalities that were not found due to scavenger removal and searcher error, and the estimated fatality rate is 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 times the Canadian estimate. Furthermore, of the 49 species found as fatalities on Vasco Road, 8 (16%) were special-status species. Some of the annual tolls, adjusted for the proportions not found, were estimated at 760 California red-legged frogs, 899 California tiger salamanders, 4 burrowing owls and 5 American badgers. These are not trivial numbers, but it can also be said that no single project contributes entirely to these death tolls. These tolls are the products of cumulative impacts from projects such as the proposed project. The impacts need to be addressed.

According to H.T. Harvey & Associates, in their supporting document attached to City of San Jose's responses to comments, "...traffic on Highway 101 immediately adjacent to the site represents a far greater source of vehicular collisions, and any contributions of traffic from the Project to traffic in the vicinity would be negligible from the perspective of risk of wildlife collisions." H.T. Harvey & Associates provide no foundation for their conclusions, which appear to be purely speculative. Where is there evidence that a busy highway is more dangerous to wildlife than two-lane roads? If wildlife are more wary about crossing busy highways, then two-lane roads would be more dangerous. Nor does H.T. Harvey provide any evidence in support of their speculated claim that road traffic impacts would be "negligible." The evidence I have seen (and cited) indicates the opposite.

Response D24: In responding to my comment that no cumulative impacts analysis was reported in the IS/MND, respondents write "...the Project site is located at the very edge of open space along Coyote Ridge, is surrounded on three sides by rural suburban development and is not located within a designated migratory wildlife corridor."

My comment remains valid, as there has been no cumulative effects analysis of biological resource impacts resulting from the proposed project. Respondents claim that the project will not cause habitat fragmentation because it is located at the boundary of the Anthropocene rather than in the middle of wildlife habitat or some imagined wildlife movement corridor. However, the respondents are mischaracterizing habitat fragmentation, which is defined as the reduced numerical capacity of a species caused by the pattern of habitat loss or degradation (Smallwood 2015). Habitat loss need not occur in the middle of wildlife habitat, nor does it require interference with a movement corridor; it only has to result in a decrease in the region's numerical capacity of a species. The concept of how wildlife movement corridors relates to habitat fragmentation is actually opposite of how it is portrayed by respondents. Corridors are human constructs intended to mitigate the effects of habitat fragmentation (Smallwood 2015).

Response D25: "As discussed in the IS/MND, construction of the project could result in impacts to roosting bats and birds. However, the IS/MND provides mitigation measures that would be implemented to reduce the impacts to roosting bats and birds to less than Significant."

Here respondents acknowledge impacts to special-status species, but other responses downplay the impacts. Whereas respondents imply that multiple mitigation measures would reduce impacts to birds and bats, preconstruction surveys is the only measure directed toward 27 of the special-status species likely to be harmed by the project, and VHP fees would be the only other measure directed to the other 3 species. By definition, preconstruction surveys do not reduce impacts; they are intended only to minimize impacts through last-minute take-avoidance. In fact, the last-minute nature of these surveys is intended for salvaging only the readily detectable animals in immediate peril of destruction by heavy machinery. An impact reduction measure would be implemented after a project is developed, but not beforehand.

Last-minute salvaging of at best a few animals qualifies as meager mitigation for project impacts on special-status species, 27 of which have no coverage under the VHP. My comment stands, that mitigation is grossly inadequate.

Thank you for the opportunity to reply,

Shawn Smallwood, Ph.D.

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