LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
Hayley@lozeaudrury.com

VIA EMAIL & WEBFORM

January 6, 2025

Kelly Modén, Chairperson
And Honorable Commissioners
Planning Commission, City of San Diego
1222 First Avenue, 5th Floor
San Diego, CA 92101
c/o Lara Gates, Deputy Director
Project Management Division, City of San Diego
lngates@sandiego.gov

Morgan Dresser, Planner
Development Services Department
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101
dsdeas@sandiego.gov

Re: Opposition Comment on the Final Mitigated Negative Declaration for the 11011 Torreyana Road Project (Project No. PRJ-1058759; SCH No. 2019060003)

Dear Honorable Members of the City of San Diego Planning Commission and Ms. Dresser:

This comment is submitted on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Final Mitigated Negative Declaration ("MND") prepared for the 11011 Torreyana Road Project (Project No. PRJ-1058759; SCH No. 2019060003) located at 11011 Torreyana Road in San Diego ("Project").

As discussed below, there is a fair argument that the Project may result in significant biological impacts. Therefore, SAFER respectfully requests that the City of San Diego ("City") prepare an environmental impact report ("EIR") before approving the Project to analyze and mitigate these impacts in accordance with the California Environmental Quality Act ("CEQA").

SAFER's review of the MND was assisted by expert wildlife biologist Dr. Shawn Smallwood, Ph.D. Dr. Smallwood's written comments and CV are attached hereto as Exhibit A and are incorporated herein by reference in their entirety.

PROJECT DESCRIPTION

The Project involves the demolition of all existing structures on the Project site to construct a 152,080-square-foot, three-story life science building, including two above-grade levels and one basement level, with a maximum building height of 30 feet. The Project will have 44 surface parking spaces and 440 parking spaces in a four-level subterranean parking garage, totaling to 484 parking spaces. The site is currently developed with a 76,684-square-foot research and development building, an above-ground parking structure, and auxiliary buildings.

The Project site occupies 10.2 acres total, with approximately 3.4 acres of buildable lot area. There is currently a 6.8-acre open space easement with the State of California on the eastern portion of the site. The Project would retain these remaining 6.8 acres of the site as open space. A new covenant of easement will be placed over 6.3 acres of the existing easement.

The site is located at 11011 Torreyana Road in the City of San Diego, northeast of the intersection of Torreyana Road and Callan Road and west of Interstate 5. The site is zoned Industrial-Park (IP-1-1) and is designated as Industrial-Scientific Research within the University Community Plan and Industrial Employment within the General Plan. Surrounding land uses include commercial development to the north, south, and west, and undeveloped land and open space areas to the east. Recreational development is located west of the site.

LEGAL STANDARD

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-20.) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code ["PRC"] § 21068; see also 14 California Code of Regulations ["CCR"] § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109.)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." (*Bakersfield Citizens*, *supra*, 124 Cal.App.4th at 1220.) The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process "protects not only the environment but also informed self-government." (*Pocket Protectors*, 124 Cal.App.4th 903, 927.)

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (PRC § 21080(d); see also *Pocket Protectors*, supra, 124 Cal.App.4th at 927.) An MND instead of an EIR is proper only if project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and . . . there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331 [quoting PRC §§ 21064.5, 21080(c)(2)].) In that context, "may" means a reasonable possibility of a significant effect on the environment. (PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors*, *supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904-05.)

An EIR must be prepared rather than an MND "whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact." (*No Oil, Inc. v City of Los Angeles* (1974) 13 Cal.3d 68, 75.) Under this "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors*, *supra*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors*, supra, 124 Cal.App.4th at 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(Kostka & Zishcke, *Practice Under CEQA*, § 6.29, pp. 273-74.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." (*Pocket Protectors*, supra, 124 Cal.App.4th at 928.)

DISCUSSION

I. There is a fair argument that the Project may have significant adverse impacts on biological resources.

Expert wildlife ecologist, Shawn Smallwood, Ph.D., has reviewed the Project's MND, its biological report, and other relevant documents regarding the Project's biological impacts. As discussed below, Dr. Smallwood found that the Project will adversely affect biological resources because (1) the MND underestimated the diversity of species present on the Project site, including several special-status species; (2) the MND relied on an inadequate biological report; (3) the MND inadequately analyzed the Project's adverse impacts on wildlife; and (4) the MND's proposed mitigation measures are insufficient to reduce the Project's biological impacts.

A. The MND did not fully account for the diversity of species present on the Project site, including several special-status species.

Dr. Smallwood's associate, biologist Noriko Smallwood, M.S., conducted a Project site visit on September 7, 2024, for 3.2 hours. (Ex. A at 1.) During her visit, Ms. Smallwood detected 37 species of vertebrate wildlife at or adjacent to the Project site, including eight special-status bird species, including the California gnatcatcher, a species listed as threatened under the Endangered Species Act. Ms. Smallwood also observed the Western gull, the wrentit, the Rufous hummingbird, the Allen's hummingbird, and the Nuttall's woodpecker, which are all listed as Birds of Conservation Concern by the U.S. Fish & Wildlife Service, the yellow-breasted chat, a California Species of Special Concern and a Group 1 Species on the San Diego County Sensitive Animal List ("CSD1"), and a red-shouldered hawk, another CSD1 and a Bird of Prey. (*Id.* at 3, 11.)

The Biological Technical Report prepared for the MND by Helix Environmental Planning, Inc. ("Helix Report") identified 11 species of vertebrate wildlife at the Project site, only one of which Ms. Smallwood did not detect during her survey. (*Id.* at 15.) Of the 37 vertebrate wildlife species that Ms. Smallwood did detect, the Helix Report failed to identify 27 and reported finding no special-status wildlife species during its surveys. (*Id.* at 15-16.) As a result of these inadequacies, the MND's conclusions about the Project's impacts to biological resources are not supported by substantial evidence. The failure of the Helix Report to account for the eight special-status species that Ms. Smallwood detected and an abundance of other wildlife at the Project site underscores the inadequacy of the MND's biological analysis and the need for an EIR.

CEQA requires government agencies to describe the "environmental setting" of the Project. (CEQA Guidelines § 15063(d)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322.) The "environmental setting" is defined as "the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." (Guidelines § 15360; *see* Guidelines § 21060.5; *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1192.) By failing to disclose the fact that the Project site contains at least eight special-status species, the MND inadequately describes the Project's "environmental setting" and thereby insufficiently analyzes the Project's biological impacts.

B. The MND relied on an inadequate biological report.

As well as the Helix Report's failure to adequately disclose the diversity of species, including special-status species, that would be affected by the Project, Dr. Smallwood found multiple other deficiencies in the Helix Report. For example, the Helix Report fails to provide essential methodological details that would help readers understand and assess its findings, such as the survey start time and duration and a checklist of habitat elements that the biologists might have used. (Ex. A at 15.) Additionally, the Helix Report depicted the boundaries between vegetation communities on the Project site as much more defined than they actually are. (*Id.*) The Helix Report's surveys for rare plants and the Crotch's bumble bee also did not meet the minimum standards or follow the guidelines set by the California Department of Fish & Wildlife ("CDFW"). (*Id.* at 16.)

Moreover, Dr. Smallwood found that the Helix Report's review of available literature and databases was incomplete because it only relied on one database, the California Natural Diversity Data Base ("CNDDB") and failed to consult other available databases, such as eBird and iNaturalist, to inform its field surveys and augment the interpretation of its findings. (*Id.* at 18.) Dr. Smallwood further noted that, by relying only on the CNDDB, the Helix Report screened out many special-status species from further consideration in characterizing the Project site's wildlife community, the CNDDB is a "positive sighting database" that "does not predict where something may be found." (*Id.*) From his evaluation based on review of other available databases and site visits, Dr. Smallwood estimates that 145 special-status species are known to occur close enough to the Project site to warrant analysis of their occurrence potential. (*Id.*) He concludes that "the site is far richer in special-status species than is characterized in Helix (2024)," and "on the whole, Helix's (2024) analyses of occurrence likelihoods are insufficiently accurate." (*Id.* at 18, 25.)

C. There is substantial evidence that the Project will have significant impact on biological resources that the MND fails to analyze and mitigate.

Dr. Smallwood concluded that the Project will have significant impacts on biological resources, including: (1) habitat loss; (2) traffic mortality; (3) bird-window collision mortality; (4) inconsistency with the City's Multiple Species Conservation Program ("MSCP") Subarea Plan and existing easement agreement; and (5) cumulative impacts.

1. <u>The Project will have a significant impact on reproductive capacity as a result of habitat loss, fragmentation, and alteration.</u>

Dr. Smallwood calculates that the Project's habitat destruction, fragmentation of the vegetative cover, and interference with wildlife movement, as well as the its increased size and high amount of light-emitting external glass, would cause the loss of 54.5 bird nesting sites and 76 nesting attempts per year, a loss that "would qualify as significant impacts that have not been analyzed by the City." (*Id.* at 26.) However, these impacts would not end with this immediate numerical loss of nesting sites, for the reproductive capacity of the Project site would also be permanently lost. (*Id.*) Dr. Smallwood estimates that the Project would prevent the production of 242 birds per year. He concludes that "the loss of 242 birds per year would be substantial, and highly significant." However, he found that the Helix Report made no attempt to measure this lost capacity. (*Id.*) This is a potentially significant impact that must be analyzed and mitigated in the EIR.

2. <u>The Project will have significant impacts on wildlife as a result of collisions with additional traffic generated by the Project.</u>

Dr. Smallwood found that the MND does not analyze the Project's potential impacts to wildlife from road collision mortality as a result of increased traffic generated by the Project. (*Id.* at 29.) As Dr. Smallwood explains, vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level. (*Id.*) Dr. Smallwood provides several studies demonstrating significant animal deaths due to collisions in the thousands annually per 100 km of road. (*Id.* at 27) The MND fails to analyze whether increased traffic generated by the Project would result in significant impacts to wildlife.

Based on the MND's trip estimates and estimates of VMTs for employees, Dr. Smallwood calculates that the Project would generate about 14,887,438 annual VMT. Based on this estimate, Dr. Smallwood calculated that the Project would cause approximately 8,158 vertebrate wildlife fatalities per year due to collisions with project-generated traffic. (*Id.* at 29.) He therefore concluded that "the project-generated traffic would cause substantial, significant impacts to wildlife," a potential impact that the MND does not analyze. (*Id.*) Dr. Smallwood's comments constitute substantial evidence supporting a fair argument that the Project's traffic will have a significant impact on special status species of wildlife. An EIR is required to analyze and mitigate this impact.

3. <u>The Project will have a significant impact on birds as a result of window collisions.</u>

According to wildlife expert Dr. Shawn Smallwood, the Project will have a significant impact on birds as a result of window collisions. The City has not analyzed or mitigated these potential impacts to special-species birds. Analyzing the potential impact on wildlife of window collisions is especially important because "[w]indow collisions are often characterized as either the second or third largest source of human-caused bird mortality." (*Id.* at 29.)

The Project would expand the size of the existing building on the site and add exterior glass windows to open airspace that is currently an essential bird habitat. The MND does not report the extent to exterior glass in the Project or offer any renderings of the proposed building. (*Id.* at 31.) However, Dr. Smallwood predicts 3.544 square meters of exterior glass on the project building. (*Id.* at 31-32.) Based on this amount of exterior glass, Dr. Smallwood estimates that the Project will cause 259 bird deaths per year from window collisions. (*Id.* at 32.) Dr. Smallwood's database review and Ms. Smallwood's site visit indicate that there are about 101 special-status bird species with the potential to use the airspace around the Project site. (*Id.* at 29.) Most of the predicted bird deaths would be of birds protected under the federal Migratory Bird Treaty Act and the California Migratory Bird Protection Act, "thus causing significant unmitigated impacts." (*Id.* at 32.) Given the estimated level of bird-window collision mortality, Dr. Smallwood found that "the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species." (*Id.*) The City must prepare an EIR to analyze and mitigate the Project's impact on special-status birds resulting from window collisions.

4. <u>The Project is Incompatible with the City's MSCP Subarea Plan and Existing Easement Agreement</u>

Dr. Smallwood concluded that the Project is potentially inconsistent with the City of San Diego's Multiple Species Conservation Program ("MSCP") Subarea Plan. Although the Helix Report claims that, consistent with the MSCP Subarea Plan's Land Use Agency Guidelines, the Project does not involve any introduction of new toxins or chemicals within the Project's multi-habitat planning area, the Helix Report also stated that there is ongoing rodent control around the existing Project site. (*Id.* at 32.) If this rodent control involves rodenticides, then it would violate the toxin prohibition of the Land Use Agency Guidelines. (*Id.*)

Furthermore, since the MND determined that the Project would not result in any significant direct impacts to sensitive vegetation communities or special-status species, it also concluded that no compensatory mitigation is needed. (*Id.*) However, Dr. Smallwood found that mitigation is warranted for the wildlife losses resulting from window collisions and project-generated traffic. (*Id.*) Without this mitigation, the Project "would interfere with the MSCP Subarea Plan's conservation goals and objectives."

Likewise, Dr. Smallwood concluded that the Project is incompatible with the open-space easement agreement on the Project site. The City filed a quitclaim to the existing easement, turning the easement over to the State of California to support the State's development of the Torrey Pines State Park ("Park"). (*Id.*) As currently planned, the Project would encroach on land under the State's easement and interfere with the Park's mission to preserve biodiversity and natural resources by destroying valuable habitat, blocking wildlife movement, and causing loss of wildlife from window collisions and project-generated traffic. (*Id.*)

Where a local or regional policy of general applicability is adopted in order to avoid or mitigate environmental effects, a conflict with that policy in itself indicates a potentially significant impact on the environment. (*Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903.) Indeed, any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal. App. 4th 859, 874 (An EIR is inadequate when the Lead Agency failed to identify the relationship of the project to relevant local plans).) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA.

(*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4.) The recent *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358 holds that the fair argument standard applies to a potential inconsistency with a plan adopted for environmental protection. (See also, *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099.)

Since the Project fails to comply with the MSHCP and the open space easement, there is a fair argument that it will have significant biological impacts that must be analyzed in an EIR.

5. <u>Cumulative Impacts</u>

CEQA documents, such as the MND, must discuss cumulative impacts and mitigate significant cumulative impacts. (14 CCR § 15130(a).) This requirement flows from CEQA Section 21083, which requires a finding that a project may have a significant effect on the environment if:

> The possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

While acknowledging new Project-related biological impacts, the MND fails to analyze the Project's potentially significant cumulative biological impacts. Instead, the MND dismisses, without evidence, the potential for cumulative impacts stemming from the Project because "impacts would be specific to the site and would not contribute to cumulative impacts." (MND at 62.) The problem with this analysis as it applies to biological resources is that the MND itself acknowledges that the Project's biological impacts are new, so they could not have possibly been analyzed cumulatively.

The question that CEQA requires the City to address, and that the MND fails to address, is whether the Project's impacts will be significant when combined with other past, current, and probable future projects. By failing to provide this basic information, the MND's cumulative biological impact analysis is not supported by substantial evidence.

Dr. Smallwood found that the MND's analysis of the Project's cumulative impacts is "fundamentally flawed," stating that "[a]mple evidence refutes Helix's stated expectation that adherence to an existing large-area plan shields a project from contributing to cumulative impacts." (Ex. A at 33.) Dr. Smallwood calculated that the Project's incremental effects would include 242 birds per year denied to California due to habitat loss, 259 annual bird fatalities from window collisions, 8,158 annual vertebrate wildlife fatalities due to collisions with project-generated traffic, and an unknown number of rodents killed by pest control. (*Id.* at 34.)

D. The MND's proposed mitigation measures are insufficient to reduce the Project's biological impacts.

The MND offers mitigation measures to reduce the Project's adverse impacts on biological resources. One proposed mitigation measure is retaining a biologist to develop restoration, revegetation, and avoidance plans before the issuance of any construction permits. (*Id.* at 34.) However, this constitutes deferred mitigation, which CEQA prohibits.

CEQA disallows deferring the formulation of mitigation measures to post-approval studies. (CEQA Guidelines § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309.) An agency may only defer the formulation of mitigation measures when it possesses "'meaningful information' reasonably justifying an expectation of compliance." (*Sundstrom* at 308; *see also Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028-29 (mitigation measures may be deferred only "for kinds of impacts for which mitigation is known to be feasible").) A lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available).) This approach helps "insure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug." (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.)

While specific details of mitigation measure may be deferred, an agency is required to (1) commit itself to mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. See *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281; *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671.

Moreover, "mitigation measure[s] [that do] no more than require a report be prepared and followed" do not provide adequate information for informed decisionmaking under CEQA. *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794; Guidelines § 15126.4(a)(1)(B). By deferring the development of specific mitigation measures, the City has effectively precluded public input into the development of those measures. CEQA prohibits this approach. As explained by the court in *Communities for a Better Env't v. Richmond* (2010) 184 Cal.App.4th 70, 92:

> [R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed

> decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment.

Mitigation Measure BIO-1, Preconstruction Avoidance Measures, Measures A-D, G, and H, constitute deferred mitigation because they entail retaining a biologist to develop restoration, revegetation, and avoidance plans in the future before the issuance of any construction permits. (Ex. A at 34.) Moreover, here the City has not committed itself to mitigation, adopted specific performance standards the mitigation will achieve, or identified the types of potential actions that can feasibly achieve the performance standards.

The City cannot rely on the development of mitigation measures in the future because there is no way to ensure that the mitigation will be adequate. For example, here, before Project approval, the public has no way to ensure that the plans to be developed by a biologist will adequately reduce the Project's adverse biological impacts to less than significant. Dr. Smallwood instead recommends that the plans be developed and presented in an EIR. (*Id.*)

The deferred mitigation is invalid under CEQA, and the Project's impacts on biological resources remain significant. An EIR is required to develop clear, enforceable mitigation measures to address the Project's significant adverse biological impacts.

Additionally, the MND proposes other mitigation measures, such as preconstruction surveys and heightened monitoring of construction activities. (*Id.* at 34-35.) However, Dr. Smallwood concludes that these measures would not avoid the long-term significant biological impacts caused by permanent habitat destruction and increased wildlife mortality from project-generated traffic and window collisions. (*Id.* at 34-35.) Dr. Smallwood's comments are substantial evidence that the Project's impacts on biological resources would remain significant, necessitating preparation of an EIR.

Dr. Smallwood instead offers numerous other mitigation measures that the City should implement to reduce the Project's significant adverse impacts on biological resources, should the Project proceed. Potential mitigation measures include monitoring and reporting of construction impacts on wildlife, commitment to no use of rodenticide and avicide for pest control, use of bird-safe glass and window treatments, compensatory mitigation for road mortality, funding of wildlife rehabilitation facilities, and native plant landscaping. (*Id.* at 35-37.)

CONCLUSION

As discussed above, there is substantial evidence supporting a fair argument that the Project may have significant adverse impacts on biological resources. An EIR is therefore required to analyze and mitigate the Project's potentially significant effects. Thus, SAFER respectfully requests that the City not rely on the MND and instead prepare and circulate an EIR before further consideration of the Project.

Sincerely,

Hayley Uno
LOZEAU DRURY LLP

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Hayley Uno
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

3 October 2024

RE: 11011 Torreyana Road Project

Dear Ms. Uno,

I write to comment on potential impacts to biological resources from the proposed 11011 Torreyana Road Project, which I understand would redevelop an existing 76,694 square-foot building into a 203,096 square-foot scientific research building on 10 acres at 11011 Torreyana Road in Torrey Pines, California. I comment on the analyses of impacts to biological resources in Helix Environmental Planning (Helix 2024) and the Subsequent Mitigated Negative Declaration (SMND). I am concerned that the SMND mischaracterizes the wildlife community, inadequately analyzes potential impacts to wildlife, and provides insufficient mitigation.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master's Degree from California State University Los Angeles, visited a site adjacent to the project site for 3.2 hours from 06:28 to 09:40 hours on 7 September 2024. The project site was not accessible from a public road, thus Noriko surveyed from Flintkote Ave, which is about 250 m east of the project site, but surrounded by similar vegetation as the project site. Noriko's survey site is intended to be interpreted as a surrogate to the site, as it can be assumed that the species Noriko detected are likewise present on the project site. She walked Flintkote Ave, stopping to scan for wildlife with use of binoculars. Noriko recorded all species of vertebrate wildlife she detected, including those whose members flew over the site or were seen nearby, off the site. Animals of uncertain species identity were either omitted or, if possible, recorded to the Genus or higher taxonomic level.

Conditions were partly cloudy with 3 MPH south wind and temperatures of 70-80° F. The vegetation surrounding Flintkote Ave included sage scrub, chaparral, and riparian (Photos 1, 2, and 3).

Photos 1, 2, and 3. *Views of the project site, 7 September 2024. Photos by Noriko Smallwood.*

Noriko saw rufous hummingbird (Photo 4), wrentit and California gnatcatcher (Photos 5 and 6), downy woodpecker (Photo 7), yellow-breasted chat and bushtit (Photos 8 and 9), house wren and house finch (Photos 10 and 11), great egret (Photo 12), white-throated swift and western gull (Photos 13 and 14), California towhee and spotted towhee (Photos 15 and 16), lesser goldfinch and blue-gray gnatcatcher (Photos 17 and 18), song sparrow and California scrub-jay (Photos 19 and 20), scaly-breasted munia and black phoebe (Photos 21 and 22), orange-crowned warbler and common yellowthroat (Photos 23 and 24), painted lady butterfly and mourning dove (Photos 25 and 26), California ground-squirrel and desert cottontail (Photos 27 and 28), Great Basin fence lizard (Photo 29), among the other species listed in Table 1. Noriko detected 37 species of vertebrate wildlife at or adjacent to the project site, including eight species with special status (Table 1).

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood
Noriko Smallwood

Photo 4. *Rufous hummingbird on the survey site, 7 September 2024. Photo by Noriko Smallwood.*

Photos 5 and 6. *Wrentit (left) and California gnatcatcher (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photo 7. *Downy woodpecker on the survey site, 7 September 2024. Photo by Noriko Smallwood.*

Photos 8 and 9. *Yellow-breasted chat (left) and bushtit (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photos 10 and 11. *House wren (left), and house finch (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photo 12. *Great egret flying over the survey site, 7 September 2024. Photo by Noriko Smallwood.*

Photos 13 and 14. *White-throated swift (left), and western gull (right) flying over the survey site, 7 September 2024. Photos by Noriko Smallwood.*


Photos 15 and 16. *California towhee (left), and spotted towhee (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*


Photos 17 and 18. *Lesser goldfinch (left), and blue-gray gnatcatcher (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photos 19 and 20. *Song sparrow (left), and California scrub-jay (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photos 21 and 22. *Scaly-breasted munia (left), and black phoebe (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photos 23 and 24. *Orange-crowned warbler (left), and common yellowthroat (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*

Photos 25 and 26. *Painted lady (left), and mourning dove (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*


Photos 27 and 28. *California ground squirrel (left), and desert cottontail (right) on the survey site, 7 September 2024. Photos by Noriko Smallwood.*


Photo 29. *Great Basin fence lizard on the survey site, 7 September 2024. Photo by Noriko Smallwood.*

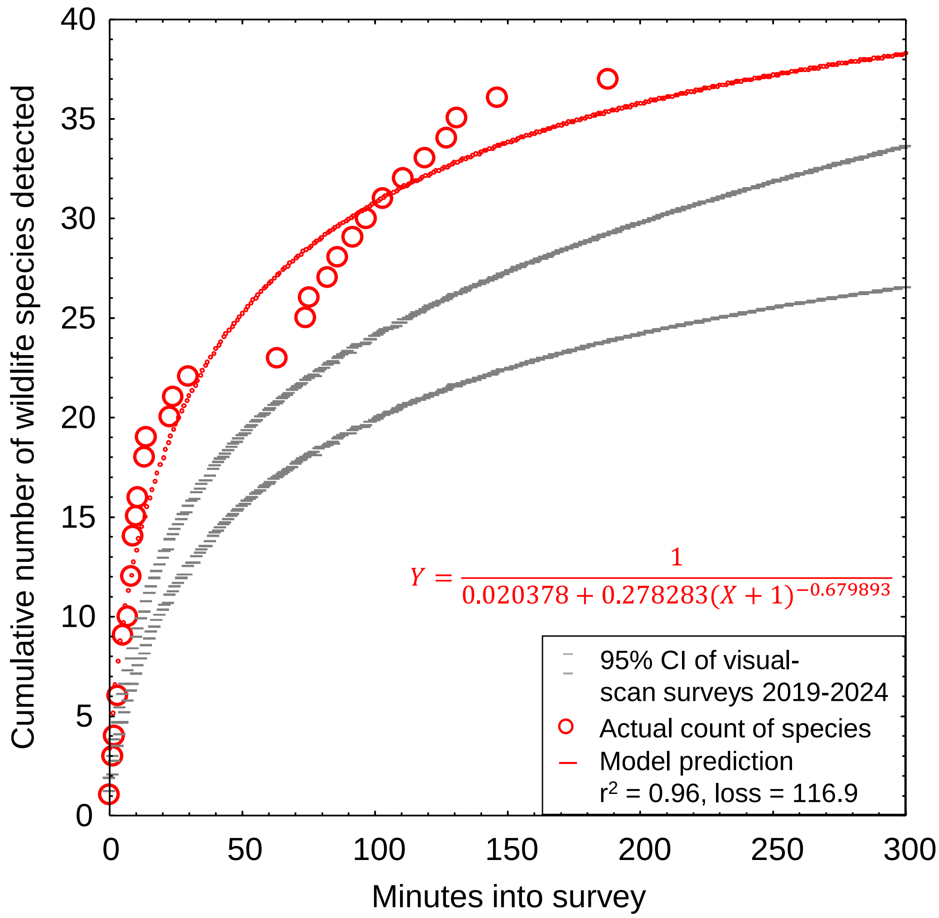
Table 1. *Species of wildlife Noriko observed during 3.2 hours of survey on 7 September 2024.*

Common name	***Species name***	Status[1]	Notes
Great Basin fence lizard	*Sceloporus occidentalis longipes*		
Mourning dove	*Zenaida macroura*		
White-throated swift	*Aeronautes saxatalis*		Foraged
Anna's hummingbird	*Calypte anna*		
Rufous hummingbird	*Selasphorus rufus*	BCC	Territorial
Allen's hummingbird	*Selasphorus sasin*	BCC	Territorial
Western gull	*Larus occidentalis*	BCC	Flew over
Great blue heron	*Ardea herodias*		
Great egret	*Ardea alba*		Flew into Penasquitos Creek
Red-shouldered hawk	*Buteo lineatus*	BOP, CSD1	
Downy woodpecker	*Dryobates pubescens*		
Nuttall's woodpecker	*Picoides nuttallii*	BCC	
Black phoebe	*Sayornis nigricans*		Foraged
California scrub-jay	*Aphelocoma californica*		
American crow	*Corvus brachyrhynchos*		
Common raven	*Corvus corax*		
Bushtit	*Psaltriparus minimus*		Foraged
Wrentit	*Chamaea fasciata*	BCC	
Blue-gray gnatcatcher	*Polioptila caerulea*		Sang, called, foraged
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Sang, called, foraged
Bewick's wren	*Thryomanes bewickii*		
House wren	*Troglodytes aedon*		
Northern mockingbird	*Mimus polyglottos*		
Scaly-breasted munia	*Lonchura punctulata*	Non-native	Small flock
House finch	*Haemorphous mexicanus*		
Lesser goldfinch	*Spinus psaltria*		Foraged
Dark-eyed junco	*Junco hyemalis*		Foraged
Song sparrow	*Melospiza melodia*		
California towhee	*Melozone crissalis*		Foraged
Spotted towhee	*Pipilo maculatus*		Foraged
Yellow-breasted chat	*Icteria virens*	SSC3, CSD1	In riparian vegetation
Orange-crowned warbler	*Oreothlypis celata*		
Common yellowthroat	*Geothlypis trichas*		
Desert cottontail	*Sylvilagus audubonii*		
California ground squirrel	*Otospermophilus beecheyi*		
Coyote	*Canis latrans*		Scat
Botta's pocket gopher	*Thomomys bottae*		Burrows

[1] Listed as FT = federal threatened, SSC = California Species of Special Concern, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), BOP = Birds of Prey (California Fish and Game Code 3503.5), and CSD1 = Group 1 species on County of San Diego Sensitive Animal List (County of San Diego 2010).

The species of wildlife Noriko detected at the project site comprised only a sampling of the species that were present during her survey. To demonstrate this, I fit a nonlinear regression model to Noriko's cumulative number of vertebrate species detected with time into her survey to predict the number of species that she would have detected with a longer survey or perhaps with additional biologists available to assist her. The model is a logistic growth model which reaches an asymptote that corresponds with the maximum number of vertebrate wildlife species that could have been detected during the survey. In this case, the model predicts 49 species of vertebrate wildlife were available to be detected on the morning of the 7th, which left 12 species undetected during her survey (Figure 1).

Figure 1. *Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan survey on 7 September 2024.*



Unknown are the identities of those twelve species Noriko missed, but the pattern in her data indicates relatively high use of the project site compared to 34 surveys at other sites she and I have completed in the region. Compared to models fit to data Noriko and I collected from 34 other sites in the region between 2019 and 2024, the data from the project site exceeded the upper bound of the 95% confidence interval of the rate of accumulated species detections with time into the survey (Figure 1). Importantly, however, the species Noriko did and did not detect on 7 September composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's one survey. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. As part of my research, I completed a much larger survey effort across 167 km^2 of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/_a + b \times (Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 13.2 species over my first 3.2 hours of surveys at my research site in the Altamont Pass (3.2 hours to match the 3.2 hours Noriko surveyed at the project site), which composed 23.2% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 37 species Noriko detected after her 3.2 hours of survey at the project site likely represented 23.2% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $^{37}/_{0.232} = 159$ species of vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 159 predicted species, then continued surveys would eventually detect 34 special-status species of vertebrate wildlife.

Because my prediction of 159 species of vertebrate wildlife, including 34 special-status species of vertebrate wildlife, is derived from daytime visual-scan surveys, and would detect few nocturnal mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance survey should serve only as a starting point toward characterization of the site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than her one survey to inventory use of the project site by wildlife. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort.

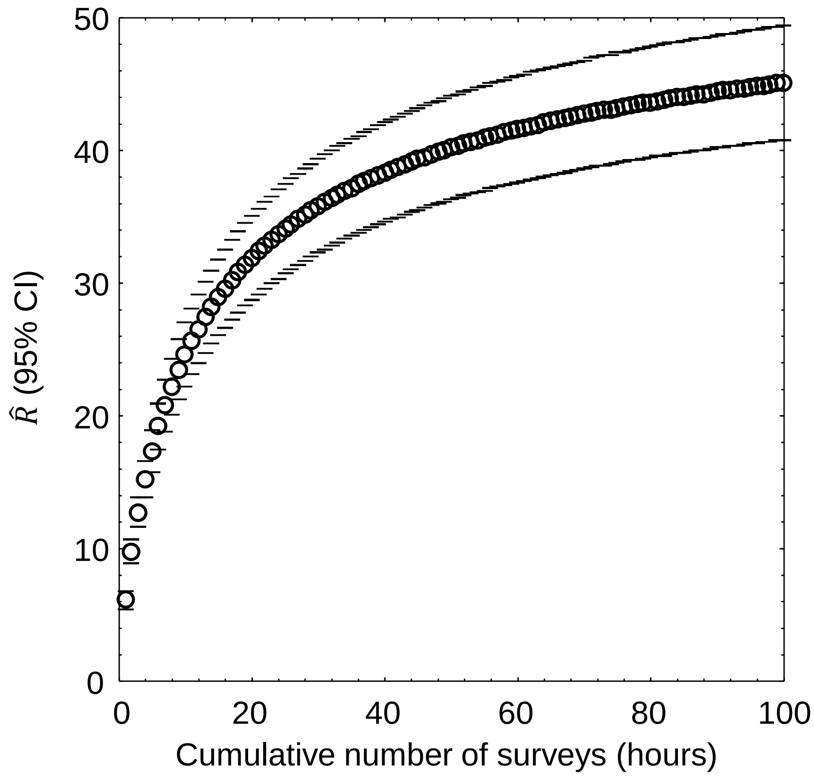


Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*

EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the basis for determining whether the site holds habitat value to wildlife, as well as a baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these required steps remain incomplete and misleading.

Environmental Setting informed by Field Surveys

To CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources.

Biologists from Helix (2024) performed surveys on the project site five separate times from January 2021 to February 2024, including a General Biological Survey (i.e., reconnaissance survey), Potentially Jurisdictional Drainage Feature Mapping, Scrub Oak Sample Collection and Identification, Torry Pine Tree Identification and Mapping, and Crotch's Bumble Bee Habitat Assessment. On the one day – 15 January 2021 – when the reconnaissance survey was performed, it was performed to detect species of plants and wildlife, map vegetation, assess habitat, and search for wetlands. Pursuing four objectives in a single survey probably inhibited success toward each.

Regarding the reconnaissance survey, Helix (2024) fails to report essential methodological details that would help the reader interpret the findings, such as the survey start time and survey duration. Both of these survey attributes affect which species are detected and the number of species detected (e.g., see Figures 1 and 2). No checklist is shared of habitat elements that the biologists might have used during their survey to assess likelihoods of occurrence of special-status species. It is therefore difficult to assess survey outcomes relative to survey effort and methods.

Helix (2024) reports having detected 11 species of vertebrate wildlife, only one of which Noriko did not detect during her survey. On the other hand, Noriko detected 37 species of vertebrate wildlife, 27 of which Helix failed to detect. It is surprising that Helix detected so few species, despite visiting the site five times with multiple biologists. It is possible that Helix started its surveys too late in the day to observe peak wildlife activity. It is also possible that Helix's biologists committed insufficient time to their surveys. Whatever the reason, Helix's detection of fewer than a third of the species detected by Noriko indicates poor sampling of the existing wildlife community.

The 38 combined species of vertebrate wildlife detected by both Helix and Noriko number fewer than a quarter of the species my analytical bridge between Noriko's findings and mine from a research site predicts. Even with Noriko's contribution, the project site remains under-surveyed, and more surveys are warranted.

Helix (2024) presents Developed as a mapped vegetation community, which it is not. Developed is a ground cover classification composed of anthropogenic structures or impervious surfaces. The vegetation communities on the project site consist of southern maritime chaparral and Diegan coastal sage scrub, both of which are sensitive vegetation communities with ranks S2 and S3, respectively, and landscaped vegetation surrounding the existing building and parking lot. In reality, the boundaries between these communities are not as hard as depicted by Helix (2024), but rather graded from one to the other. The landscaped vegetation, which is simply vegetation propagated since ground disturbance to construct the existing building, is habitat to many species of wildlife, and can be just as important to wildlife as are southern maritime chaparral and Diegan coastal sage scrub. In this case, nearly half (17) of the mapped Torrey Pines and all of the mapped Nuttall's Scrub Oak are located on the open space easement, all of which is covered by vegetation important to wildlife.

Helix (2024) did not follow the CDFW (2018) survey guidelines for rare plants. The survey of 15 January 2021, which was the survey identified by Helix as the general biological survey dedicated to finding and identifying plants, was outside the blooming season of most of the special-status species of plants likely to grow in the area. Furthermore, Helix did not space surveys through the blooming season because with only one survey there were not enough surveys to space. Also, there was no use of reference sites to observe plants to ensure that the site surveys corresponded with the period of blooming. Multiple reporting standards were also unmet.

Helix (2024) reports finding no special-status species of wildlife during its surveys. However, only 250 m to the east, Noriko found eight special-status species of wildlife, including California gnatcatcher and yellow-breasted chat, and she detected these eight special-status species in only 3.2 hours. That Helix found none suggests that Helix's biologists spent very little time on the site, were distracted by other objectives, or should have been accompanied by one or more experienced biologists.

The Crotch's bumble bee surveys failed to meet the minimum standards of the CDFW (2023) protocol. Only a habitat assessment survey was performed on 20 February 2024. According to Helix (2024:3), "The survey was conducted in accordance with the Survey Considerations for CESA Candidate Bumble Bee Species ..." and "A full survey was not warranted considering the habitat assessment of the impact area demonstrated a lack of suitable habitat." However, the habitat assessment did not demonstrate a lack of habitat. (The term "suitable habitat" is redundant, as by definition habitat is suitable and there is no such thing as unsuitable habitat.) Whereas an absence determination naturally follows from the negative findings of properly performed detection surveys, the following questions must be answered negatively to determine absence based on the habitat assessment:

A) Are there occurrence records nearby the project site?
B) Is the site's vegetation cover typical of where the species can find foraging, nesting, and/or overwintering resources?
C) Is the surrounding area's vegetation cover typical of where the species can find foraging, nesting, and/or overwintering resources?

Furthermore, the habitat assessment needs to have been performed during the Colony Active Season.

If the answers to these questions are compellingly negative, then detection surveys are not necessary, but they could be implemented to make certain the site is absent of Crotch's bumble bee. If the answers to these questions are affirmative or not compellingly negative, then it should be assumed that Crotch's bumble bee habitat exists on the site until detection surveys prove otherwise.

Summarized in Table 2, the habitat assessment performed by Helix (2024) largely fell short of the minimum standards of CDFW's (2023) guidelines. The field survey portion of the habitat assessment was completed outside the Colony Active Season. Helix (2024) does not report having submitted its findings to CDFW, nor is there quantification of foraging resources. There is no examination of resources important to Crotch's bumble bee outside what Helix defines as the "impact area," which is inconsistent with the guidelines. Evidence is lacking of a lack of resources on the project site.

Table 2. *Crosscheck between the standards of the CDFW (2023) survey guidelines for Crotch's bumble bee and what was accomplished at the project site.*

Habitat Assessment Standard in CDFW (2023)	**Assessment of surveys completed**	**Was the standard met?**
Submitted to CDFW	No report of submission	No
Include historical and current species occurrences as well as proximity to the last known sighting	Sightings very close to the site are noted	Yes
Include data from site visits to observe and document potential habitat including potential foraging, nesting, and/or overwintering resources	Summary description, but no data per se	Maybe
Should quantify foraging resources across multiple site visits, corresponding with the Colony Active Season: April to August	Only one survey, which was completed outside the active season	No
Record all flowering plants including non-natives and invasives as foraging plants	Focused on "impact area"	No
Record nesting resources such as bare ground, rodent burrows, and other potential nesting sites that may support bumble bee colonies	Focused on "impact area"	No
Record presence of Leaf litter and woody forest edge that could provide overwintering habitat	Focused on "impact area"	No
Survey surrounding areas	Only surveyed the "impact area"	No

To question A, Helix (2024) reports multiple Crotch's bumble bee occurrence records very near the project site, several of which are within 2.1 miles of the site (one was 1.2 miles from the site, and another was 1.3 miles from the site). The answer to question A is affirmative.

To question B, the ground cover of the site typifies ground cover where Crotch's bumble bees have been found. Helix (2024) also reports the presence of at least one plant that provides forage to Crotch's bumble bees. The answer to question B is affirmative.

To question C, although Helix (2024) did not survey the surrounding area let alone the entirety of the project site, Google Earth imagery reveals the vegetation around the occurrence records to be similar to that of the project site and its surrounding area. The answer to question C is affirmative.

The answers to all three habitat assessment questions are affirmative. Detection surveys for Crotch's bumble bee are warranted, but have yet to be completed.

Environmental Setting informed by Desktop Review

The purpose of literature and database review and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths.

There is no indication that Helix (2024) reviewed eBird (https://eBird.org) or iNaturalist (https://www.inaturalist.org) for documented occurrence records of vertebrate wildlife at or near the project site. Helix (2024) queried the California Natural Diversity Data Base (CNDDB) for documented occurrences of special-status species within some unreported distance from the project site. By doing so, Helix (2024) screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." Helix (2024) misuses CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to CNDDB than were species assigned special status since the inception of the CNDDB. The lack of many CNDDB records for species recently assigned special status had nothing to do with whether the species' geographic ranges overlapped the project site, but rather more to do with the brief time for records to have accumulated since the species were assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB cannot provide the basis for estimating occurrence likelihoods, either.

In my assessment based on database reviews and site visits, 145 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence potential (Table 3). Of these 145 species, 3 were recorded on the project site, and another 77 (53%) species have been documented within 1.5 miles of the site ('Very close'), another 25 (17%) within 1.5 and 4 miles ('Nearby'), and another 31 (21%) within 4 to 30 miles ('In region'). Nearly three fourths (72%) of the species in Table 3 have been reportedly seen within 4 miles of the project site. The site therefore supports multiple special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on proximity of recorded occurrences. The site is far richer in special-status species than is characterized in Helix (2024).

Table 3. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. MSCP cover refers to whether incidental take of the specie is covered by the San Diego Multiple Species Conservation Program. Entries in bold font identify species Noriko detected.*

Common name	***Species name***	**Status[1]**	**MSCP cover**	**SMND occurrence likelihood**	**Database records, Site visits**
Wandering skipper	*Panoquina errans*	CSD1	Yes		Very close
Quino checkerspot butterfly	*Euphydryas editha quino*	FE, CSD1	Yes	Not expected	In region
Monarch butterfly	*Danaus plexippus*	FC, CSD2			Very close
Hermes copper	*Lycaena hermes*	FT, CSD1			In region
Crotch's bumble bee	*Bombus crotchii*	CCE		Low	Very close
Western spadefoot	*Spea hammondii*	SSC, CSD2		Low	Nearby
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Yes		In region
Western pond turtle	*Emys marmorata*	SSC	Yes	None	In region
San Diego Banded gecko	*Coleonyx variegatus abbotti*	SSC, CSD1			In region
Coast horned lizard	*Phrynosoma blainvillii*	SSC, CSD2	Yes	Low	Nearby
Coronado skink	*Plestiodon skiltonianus interparietalis*	WL, CSD2		Low	In region
Orange-throated whiptail	*Aspidoscelis hyperythra*	WL, CSD2	Yes	High	Very close
San Diegan tiger whiptail	*Aspidoscelis tigris stejnegeri*	SSC, CSD2		High	Very close
San Diegan legless lizard	*Anniella stebbinsi*	SSC		Low	Very close
Coastal rosy boa	*Lichanura trivirgata*	FSC [1993] , CSD2			Nearby
California glossy snake	*Arizona elegans occidentalis*	SSC, CSD2		Low	In region
Baja California coachwhip	*Masticophis fuliginosus*	SSC			In region
San Diego ringneck snake	*Diadophis punctatus similis*	CSD2			Nearby
Coast patchnose snake	*Salvadora hexalepis virgultea*	SSC, CSD2		Low	In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC, CSD1		None	Nearby
South coast garter snake	*Thamnophis sirtalis pop. 1*	SSC, CSD2			In range
Red diamond rattlesnake	*Crotalus ruber*	SSC, CSD2		Moderate	Very close
Brant	*Branta bernicla*	SSC2			Very close
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL			Nearby

Common name	*Species name*	Status[1]	MSCP cover	SMND occurrence likelihood	Database records, Site visits
Moffitt's Canada goose	*Branta canadensis moffitti*	CSD2	Yes		Nearby
Redhead	*Aythya americana*	SSC2, CSD2			Very close
Western grebe	*Aechmophorus occidentalis*	BCC, CSD1			Very close
Clark's grebe	*Aechmophorus clarkii*	BCC			Very close
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE, BCC, CSD1			Nearby
Black swift	*Cypseloides niger*	SSC3, BCC, CSD2			Nearby
Vaux's swift	*Chaetura vauxi*	SSC2, BCC			Very close
Costa's hummingbird	*Calypte costae*	BCC			Very close
Rufous hummingbird	*Selasphorus rufus*	BCC			**Very close**
Allen's hummingbird	*Selasphorus sasin*	BCC			**Very close and on site**
Light-footed Ridgway's rail	*Rallus obsoletus levipes*	FE, CE, CFP	Yes		Very close
Yellow rail	*Coturnicops noveboracensis*	SSC, BCC			In region
Mountain plover	*Charadrius montanus*	SSC2, BCC, CSD2	Yes		In region
Snowy plover	*Charadrius nivosus*	BCC	Yes		Very close
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC, BCC	Yes	None	In region
Whimbrel	*Numenius phaeopus*	BCC			Very close
Long-billed curlew	*Numenius americanus*	WL, CSD2	Yes		Very close
Marbled godwit	*Limosa fedoa*	BCC			Very close
Red knot (Pacific)	*Calidris canutus*	BCC			Very close
Short-billed dowitcher	*Limnodromus griseus*	BCC			Very close
Willet	*Tringa semipalmata*	BCC			Very close
Laughing gull	*Leucophaeus atricilla*	WL, CSD2			Nearby
Heermann's gull	*Larus heermanni*	BCC			Very close
Western gull	*Larus occidentalis*	BCC			**Very close**
California gull	*Larus californicus*	BCC, WL, CSD2			Very close
California least tern	*Sternula antillarum browni*	FE, CE, FP, CSD1	Yes	None	Very close
Gull-billed tern	*Gelochelidon nilotica*	BCC, SSC3			Nearby
Black tern	*Chlidonias niger*	SSC2, BCC, CSD2			In region
Elegant tern	*Thalasseus elegans*	BCC, WL, CSD1	Yes		Very close

Common name	***Species name***	**Status[1]**	**MSCP cover**	**SMND occurrence likelihood**	**Database records, Site visits**
Black skimmer	*Rynchops niger*	BCC, SSC3, CSD1			Very close
Common loon	*Gavia immer*	SSC, CSD2			Very close
Wood stork	*Mycteria americana*	SSC1, CSD2			Very close
Brandt's cormorant	*Urile penicillatus*	BCC			Very close
Double-crested cormorant	*Phalacrocorax auritus*	WL, CSD2			Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC, CSD2			Very close
California brown pelican	*Pelecanus occidentalis californicus*	CFP, CSD2	Yes		Very close
Least bittern	*Ixobrychus exilis*	SSC2, CSD2			Very close
Great blue heron	*Ardea herodias*	CSD2			Very close
Reddish egret	*Egretta rufescens*	CSD2			Very close
Green heron	*Butorides striatus*	CSD2			Very close
White-faced ibis	*Plegadis chihi*	WL, CSD1	Yes		Very close
Turkey vulture	*Cathartes aura*	BOP, CSD1			Very close
Osprey	*Pandion haliaetus*	WL, BOP, CSD1	Yes	None	Very close
White-tailed kite	*Elanus leucurus*	CFP, BOP, CSD1		Low	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, BOP, TWL, CFP, CSD1	Yes		Nearby
Northern harrier	*Circus cyaneus*	SSC3, BCC, BOP, CSD1	Yes	Low	Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP, CSD1			Very close
Cooper's hawk	*Accipiter cooperi*	WL, BOP, CSD1	Yes	High	Very close
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP CSD1	Yes		Very close
Red-shouldered hawk	*Buteo lineatus*	BOP, CSD1			**Very close and on site**
Swainson's hawk	Buteo swainsoni	CT, BOP, CSD1	Yes		Very close
Zone-tailed hawk	*Buteo albonotatus*	BOP			Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP			Very close
Ferruginous hawk	*Buteo regalis*	BOP, WL, CSD1	Yes		Nearby
Barn owl	*Tyto alba*	BOP, CSD2			Very close
Western screech-owl	*Megascops kennicotti*	BOP			Very close
Great-horned owl	*Bubo virginianus*	BOP			Very close

Common name	***Species name***	**Status¹**	**MSCP cover**	**SMND occurrence likelihood**	**Database records, Site visits**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP, CSD1	Yes		Very close
Long-eared owl	*Asio otus*	BCC, BOP, SSC3, CSD1			In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP, CSD2			In region
Lewis's woodpecker	*Melanerpes lewis*	BCC, CSD1			Nearby
Nuttall's woodpecker	*Picoides nuttallii*	BCC			**Very close**
American kestrel	*Falco sparverius*	BOP			Very close
Merlin	*Falco columbarius*	WL, BOP, CSD2			Very close
Peregrine falcon	*Falco peregrinus*	BOP, CSD1	Yes	Low	Very close
Prairie falcon	Falco mexicanus	WL, BOP, CSD1			Nearby
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2, CSD2			Very close
Willow flycatcher	*Empidonax traillii*	CE			Very close
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE			In range
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2, CSD1			Very close
Least Bell's vireo	*Vireo belli pusillus*	FE, CE, CSD1	Yes	None	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2, CSD1			Very close
Oak titmouse	*Baeolophus inornatus*	BCC			Nearby
California horned lark	*Eremophila alpestris actia*	WL, CSD2			Very close
Bank swallow	*Riparia riparia*	CT, CSD1			Very close
Purple martin	*Progne subis*	SSC2, CSD1			Nearby
Wrentit	*Chamaea fasciata*	BCC			**Very close and on site**
California gnatcatcher	*Polioptila c. californica*	FT, SSC2, CSD1	Yes	High	**Very close**
Clark's marsh wren	*Cistothorus palustris clarkae*	SSC2			In range
San Diego cactus wren	*Campylorhynchs brunneicapillus sandiegensis*	BCC, SSC1, CSD1	Yes	Low	In range
California thrasher	*Toxostoma redivivum*	BCC			Very close
Western bluebird	*Sialia mexicana*	CSD2	Yes		Very close
Cassin's finch	*Haemorhous cassinii*	BCC			In region
Lawrence's goldfinch	*Spinus lawrencei*	BCC			Very close

Common name	*Species name*	Status[1]	MSCP cover	SMND occurrence likelihood	Database records, Site visits
Grasshopper sparrow	*Ammodramus savannarum*	SSC2, CSD1		None	Very close
Black-chinned sparrow	*Spizella atrogularis*	BCC			Nearby
Bell's sage sparrow	*Amphispiza b. belli*	WL, CSD1		Moderate	In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, BCC			In range
Belding's savannah sparrow	*Passerculus sandwichensis beldingi*	CE, BCC, CSD1	Yes	None	Very close
Large-billed savannah sparrow	*Passerculus sandwichensis rostratus*	SSC2, CSD2	Yes		Nearby
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL, CSD1	Yes	High	Very close
Yellow-breasted chat	*Icteria virens*	SSC3, CSD1			**Very close**
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3			Very close
Bullock's oriole	*Icterus bullockii*	BCC			Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1, CSD1	Yes		Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3, BCC, CSD1			Nearby
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC			Nearby
Yellow warbler	*Setophaga petechia*	SSC2, CSD2			Very close
Summer tanager	*Piranga rubra*	SSC1, CSD2			Very close
Pallid bat	*Antrozous pallidus*	SSC, WBWG H, CSD2			In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H, CSD2			In region
Spotted bat	*Euderma maculatum*	SSC, WBWG H, CSD2		Low	In region
California leaf nosed bat	*Macrotus californicus*	SSC, WBWG H, CSD2			In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG H, CSD2		Low	Nearby
Hoary bat	*Lasiurus cinereus*	WBWG M			Nearby
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG H			In region
Small-footed myotis	*Myotis cililabrum*	WBWG M, CSD2			In region
Miller's myotis	*Myotis evotis*	WBWG M, CSD2			In region
Fringed myotis	*Myotis thysanodes*	WBWG H, CSD2			In range
Long-legged myotis	*Myotis volans*	WBWG H, CSD2			In region
Yuma myotis	Myotis yumanensis	WBWG LM, CSD2			Nearby
Western mastiff bat	*Eumops perotis*	SSC, WBWG H, CSD2		Low	In region

Common name	***Species name***	**Status**[1]	**MSCP cover**	**SMND occurrence likelihood**	**Database records, Site visits**
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG M, CSD2		Low	In region
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG MH, CSD2			In region
American badger	*Taxidea taxus*	SSC, CSD2	Yes	Low	In region
Dulzura pocket mouse	*Chaetodipus californicus femoralis*	SSC, CSD2			In range
Northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*	SSC, CSD2		Low	In region
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC, CSD2			In range
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE, SSC, CSD1		Low	In range
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC, CSD2		High	Nearby
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC, CSD2		Low	In region

[1] Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, CT or CE = California threatened or endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game Code 3511), SSC = California Species of Special Concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H), CSD1 and CSD2 = Group 1 and Group 2 species on County of San Diego Sensitive Animal List (County of San Diego 2010).

Only 36 (25%) of the species in Table 3 are analyzed for occurrence potential in Helix (2024), having omitted from its analysis 109 (75%) of the species in Table 2. Of the species omitted from Helix's analysis, 61 have been recorded within 1.5 miles of the site, 20 have been recorded within four miles of the site, and 18 have been recorded between 4 and 30 miles of the site. Of the species analyzed for occurrence likelihood by Helix (2024), only 28 are determined to have potential to occur. Of the eight species that Helix (2024) assessed and determined absent, occurrence records place five within 1.5 miles, one within 4 miles, and two between 4 and 30 miles from the site. On the whole, Helix's (2024) analyses of occurrence likelihoods are insufficiently accurate. Found on the survey site by Noriko were multiple special-status species left out of Helix's analysis, as well as a species Helix determines absent from the site.

POTENTIAL BIOLOGICAL IMPACTS

An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, the whole of a species, and ecological communities. The accuracy of this analysis depends on an accurate characterization of the existing environmental setting. In the case of the proposed project, the existing environmental setting has not been accurately characterized, and several important types of potential project impacts have been inadequately analyzed. These types of impacts include habitat loss, interference with wildlife movement, bird-window collision and wildlife-automobile collision mortality.

VEGETATION COMMUNITIES

Helix (2024) concludes that impacts to sensitive vegetation communities would be less than significant due to minimal incursion of project construction across the boundaries of these communities. A problem with this conclusion is that Helix (2024) adds confusion over what is the project site versus what Helix refers to as" onsite." Helix (2024) depicts a project boundary that encompasses 3.4 acres of an existing building, parking lot and landscaping, and 6.7 acres of Southern Maritime Chapparal and Diegan Coastal Sage Scrub, but frequently refers to onsite as only that portion of the project site where construction would take place. The confusion seems to arise from the fact that what Helix refers to as onsite happens to overlap an existing open space easement that extends to the eastern boundary of the project site. Actions taken that conflict with the intended purpose of the open space easement affects the integrity of the vegetation communities of the easement.

Another problem with Helix's conclusion is the ongoing and presumably future efforts to control "pests" around the project site. The only type of animal Helix identifies as pests is rodents, but rodents are important members of the vegetation communities at issue. California ground squirrels and pocket gophers are rodents, and both are ecological keystone species due to the disproportionate effects they have on soils, the plant community, and on other species of wildlife. Other rodents are pocket mice and kangaroo rats, multiple species of which are special-status species in the project area. None of these rodents would recognize the boundaries Helix (2024) depicts between landscaped areas and sensitive natural communities, which means that ongoing pest control is taking animals that are supposed to be conserved by the open space easement.

HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, and habitat fragmentation multiplies the effects of habitat loss but impeding movement of wildlife among remaining habitat patches. Helix (2024) makes no attempt to estimate this lost capacity for any of the wildlife species potentially affected, presumably because Helix assumes the sensitive vegetation communities and their wildlife adjacent to the project footprint would not be affected by the project. However, the project would more than double the size of the existing building, facing much more external glass to the natural areas and emitting much more light. The effects of these changes could include abandonment of nest sites by birds.

In the case of birds, two methods exist for estimating the loss of productive capacity that would be caused by the project. One method would involve surveys to count the number of bird nests and chicks produced. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere. Several studies have estimated total avian nest density at locations that had likewise been highly fragmented. Two study sites in grassland/wetland/woodland complexes within agricultural matrices had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. To acquire a total nest density closer to conditions in California, Noriko and I surveyed various patches of vegetation cover in northern and southern California throughout the breeding seasons of 2023 and 2024. The most relevant study sites to the vegetation covers on the project site consist of a 1.23-acre patch of sage-scrub, a 2-acre patch of mixed oak woodland and sage-scrub, and a 0.55-acre patch of oak woodland, all in Murrieta, CA, where Noriko estimated an average of 5.45 nests/acre. Applying the mean of these estimates to the 10 acres of sage-scrub and chaparral would predict 54.5 nest sites on the project site. Assuming 1.39 broods per nest site, which is the average among 322 North American bird species I asked Noriko to review, then I predict the project would cost California 76 nest attempts/year if birds would indeed abandon the project area in the face of the proposed new building.

The loss of 54.5 nest sites and 76 nest attempts per year would qualify as significant impacts that have not been analyzed by the City. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 220 fledglings per year. Assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 242 birds per year denied to California. The loss of 242 birds per year would be substantial, and highly significant.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Helix appropriately reports that the vegetation community of the project site is contiguous with the same vegetation community extending north, south and east of the project site. According to Helix (2024:16), "As such, habitat within the eastern portion of the site may facilitate wildlife access and usage of the site, and contributes to the larger wildlife movement linkage and corridor within the local area and northern San Diego region." I concur with Helix. The project site is important to wildlife movement in the region.

TRAFFIC IMPACTS TO WILDLIFE

Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic to get to and from the project site (Photos 30—32), including along roads far from the project footprint. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). 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.

Photo 30. *A Gambel's quail dashes across a road* on *3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.*

Photo 31. *Mourning dove killed by vehicle on a California road. Photo by Noriko Smallwood, 21 June 2020.*

Photo 32. *Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 12,187 animals killed by traffic on the road. This fatality number over 1.25 years and 2.5 miles of road translates to 3,900 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 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. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 11.7% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts to wildlife

The SMND does not predict annual VMT, but it does report an average 25.1 miles per employee per day and 1,625 employee trips per day. Assuming these predictions apply 265 days per year, I predict 14,887,438 annual VMT. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 8,158 vertebrate wildlife fatalities per year.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The City does not analyze this potential impact, nor does it propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated, traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts.

BIRD-WINDOW COLLISIONS

Many special-status species of birds have been recorded at or near the aerosphere of the project site. My database review and Noriko's and Helix's site visits indicate there are 101 special-status species of birds with potential to use the site's aerosphere (Table 3). All of the birds represented in Table 3 can quickly fly from wherever they have been documented to the project site, so they would all be within brief flights to the proposed project's windows. At the California Academy of Sciences, the glass facades facing adjacent gardens killed 0.077 and 0.086 birds per m^2 of glass per year (Kahle et al. 2016), which might not look like large numbers at first read, but which translate to large numbers of dead birds when projected to the extent of glass on the project (see below). This study also documented many Allen's hummingbird collisions as well, which is significant to the project because Noriko observed Allen's hummingbird near the site.

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only 2 of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors

– search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From 24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m² of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m² of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The SMND does not report the extent of exterior glass in the project, nor does it depict any schematics or renderings of the proposed building. Based on a mean 0.0233 m² of exterior glass/sf of five office buildings multiplied against 152,080 sf project floor space in the project, I predict 3,544 m^2 of exterior glass on the project building. Based on this amount of glass on the building, I predict 259 (95% CI: 154–364) bird deaths per year.

The vast majority of these predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant unmitigated impacts. Given the predicted level of bird-window collision mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of both terrestrial and aerial habitat of birds and other sensitive species. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the building's airspace into a lethal collision trap to birds.

MSCP SUBAREA PLAN CONSISTENCY

In its response to Land Use Adjacency Guidelines to the City's MSCP Subarea Plan, Helix (2024) writes, "The proposed project does not involve agriculture or the creation of recreational areas, such as playing fields, or any other uses that would introduce new toxins, chemicals, or by-products within the MHPA." However, Helix (2024) earlier reported ongoing rodent control around the existing project area. If the rodent control is making use of rodenticides, then this activity is a violation of the Land Use Adjacency Guidelines involving toxins.

Because the SMND determines that the project would not result in significant direct impacts to sensitive vegetation communities or special status species, it also determines that no compensatory mitigation is warranted. However, as noted above many birds would collide with the building's windows, and many animals would be killed by project-generated traffic. Some of the animals killed by windows and automobiles would be special-status species. Mitigation for these losses is warranted. Without this mitigation, the project would interfere with the MSCP Subarea Plan's conservation goals and objectives.

INCOMPATIBILITY WITH EXISTING EASEMENT AGREEMENT

The City filed a quitclaim to its easement agreement, turning over the easement to the State of California in support of the State's development of the Torry Pines State Park. The Mission Statement of California State Parks is "T[t]o provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation." (https://www.parks.ca.gov/). The project, as currently planned, would encroach on land under the State's easement, and it would interfere with the mission statement of State Parks. It would undermine the protection of California's extraordinary biological diversity and the protection of California's most valued natural resources by taking valuable habitat and exposing many species to collision mortality with windows and project-generated traffic. It would also undermine the mission statement by interfering with wildlife movement to and from Torrey Pines State Park.

CUMULATIVE IMPACTS

The SMND (p. 62) concludes that although project construction would potentially cause significant impacts to biological resources, "impacts would be specific to the site and would not contribute to cumulative impacts." The SMND's conclusion essentially rejects CEQA's premise that a project's impact can be individually limited but cumulatively considerable when considered incrementally to other impacts or in combination with the impacts of other projects. The SMND's analysis is fundamentally flawed.

Helix (2024:28) concludes "Projects which adhere to the City's MSCP Subarea Plan (City 1997) are not expected to have significant cumulative impacts to resources regulated and covered by these plans." And, "Adverse cumulative impacts are not expected from the implementation of the proposed project." According to CEQA Guidelines §15064(h)(3), "When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable." Neither Helix (2024) nor the SMND does this.

Ample evidence refutes Helix's stated expectation that adherence to an existing large-area plan shields a project from contributing to cumulative impacts. Even with a plethora of General Plans, Habitat Conservation Plans, and Natural Communities Conservation Plans, California's wildlife have continued to decline. Breeding Bird Survey trends are mostly negative. eBird trends are mostly negative. Emergency listings are made for an increasing number of species, and listing petitions are being submitted. To measure the impacts of habitat loss to wildlife caused by development projects, Noriko Smallwood and I revisited 80 sites of proposed projects that we had originally surveyed in support of comments on CEQA review documents (Smallwood and Smallwood 2023). We revisited the sites to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration in order to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. All of the developed sites had included mitigation measures to avoid, minimize or compensate for impacts to wildlife. Nevertheless, we found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. We reported that "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds (-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite all of the mitigation measures and existing policies and regulations.

The project's incremental effects would include 242 birds per year denied to California due to habitat loss, 8,158 vertebrate wildlife fatalities per year due to collisions with project-generated auto traffic, 259 bird fatalities per year due to collisions with the building's windows, and an unknown number of rodents killed by pest control.

MITIGATION

The SMND characterizes the mitigation measures as part of a Mitigation, Monitoring and Reporting Program, of which most of the details are to be developed by a biologist and presented to the City prior to the issuance of any construction permits.

BIO-1 Preconstruction Avoidance Measures

A–D and G, H *Retain a biologist who will develop restoration, revegetation and avoidance plans and ensure necessary permits are obtained. The biologist will flag the boundaries of disturbance, and to provide buffers around sensitive plants or wildlife. Biologist will educate construction workers to improve avoidance of impacts*.

While I concur with these measures, I suggest that they be planned out ahead of the environmental review. The public and decision-makers ought to have the opportunity to comment on them. I suggest that these plans be developed and presented in an EIR.

I must point out, however, that these measures would not avoid the long-term impacts caused by habitat destruction and wildlife collision mortality caused by project-generated traffic and the building's windows.

E *Either avoid construction in avian breeding season or perform preconstruction survey "to determine the presence or absence of Cooper's Hawk and California Gnatcatcher … within 10 calendar days prior to the start of construction*"

Preconstruction surveys cannot determine the absence of Cooper's hawk, California gnatcatcher or any other species of wildlife. Preconstruction surveys are not intended for this purpose. Only the completion of protocol-level detection surveys can support absence determinations. Detection surveys are performed at the time of year and in a manner intended to maximize the likelihood of detection, whereas a preconstruction survey is timed according to the construction schedule which might not be ideal from a biological perspective, and the preconstruction survey would lack the methods of a detection survey to maximize detection probability.

Preconstruction, take-avoidance surveys consist of two steps, both of which are very difficult because birds are highly adept at concealing their nests. First, the biologist(s) performing the survey must identify birds that are breeding. Second, the biologist(s) must locate the breeding birds' nests. The first step is typically completed by observing bird behaviors such as food deliveries and nest territory defense. These types of observations typically require many surveys on many dates spread throughout the breeding season. To identify the birds of all species nesting on a site requires a much greater survey effort than a single survey only days prior to the start of construction. The biologists conducting the preconstruction survey would be very lucky to find any of the bird nests that are available to be found at the time of the survey.

Even if nests are found in a preconstruction survey, the nests might be salvaged, but the nest sites cannot be protected. Many birds demonstrate considerable fidelity to nest sites by returning to use them year after year. Whereas a nest might be salvaged, the nest site would not survive project construction. The impacts to nesting birds are not avoided merely with salvage.

F *Preconstruction survey for special-status species of plants*

As with birds, the timing of a preconstruction survey would be dictated by the construction schedule rather than the biologically ideal time to maximize detection probability. Performing a preconstruction survey at the wrong time of year can easily result in plants being missed and then destroyed by construction. The CDFW (2018) survey guidelines for rare plants needs to be implemented prior to the certification of the environmental review document.

BIO-1 Measures During Construction

A and B are more construction monitoring measures such as ensuring that construction activities do not encroach on areas to be protected, and implementation of construction delays as needed to protect Cooper's hawk nests.

I concur with the proposed measures, but I have to point out that the conservation benefits they bring are trivial compared to the impacts. The nest sites destroyed by construction would be permanently lost, resulting in a net loss of Cooper's hawks and other birds.

BIO-1 Post-Construction: "*In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines…*"

The only way that this measure can prove effective is by performing sufficient surveys before construction to establish baselines of distribution and abundance of each of the species at issue, and then performing sufficient surveys after construction to compare the distribution and abundance of each of the species following construction. See Smallwood and Smallwood (2023) for an example of a cursory survey effort to measure the impacts of projects. Much more survey effort would b needed to successfully implement the BIO-1 post-construction mitigation measure.

RECOMMENDED MEASURES

Construction Monitoring: Should the project go forward, qualified biologists should be required to monitor construction impacts to wildlife. However, it should also be required that the monitor completes a report of the findings of construction monitoring. All cases of potential construction harm to wildlife should be reported to US Fish and Wildlife/California Department of Fish and Wildlife, and to the City, along with what was done to prevent or minimize or rectify injuries. All injuries and fatalities should be reported to the same parties, along with the disposition of any remains. The report be made available to the public.

Pest Control: The Project should commit to no use of rodenticides and avicides. It should commit to no placement of poison bait stations or traps outside the building. The ongoing pest control practices should stop.

Guidelines on Building Design to Minimize Bird-Window Collisions: If the Project goes forward, it should adhere to available Bird-Safe Guidelines, such as those prepared by American Bird Conservancy and New York and San Francisco. The American Bird Conservancy (ABC) produced an excellent set of guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015). The City of San Francisco (San Francisco Planning Department 2011) also has a set of building design guidelines, based on the excellent guidelines produced by the New York City Audubon Society (Orff et al. 2007). The ABC document and both the New York and San Francisco documents provide excellent alerting of potential bird-collision hazards as well as many visual examples.

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015). For example, Feather Friendly® circular adhesive markers applied in a grid pattern across all windows reduced bird-window collision mortality by 95% in one study (Riggs et al. 2023) and by 95% in another (de Groot et al. 2021). Another study tested the efficacy of two filmshades to be applied exteriorly to windows prior to installations: BirdShades increased bird-window avoidance by 47% and Haverkamp increased avoidance by 39% (Swaddle et al. 2023).

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor newly constructed buildings or homes for fatalities.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by project-generated road traffic in the region. I suggest that this mitigation be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments. Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with automobiles and windows.

Landscaping: If the Project goes forward, California native plant landscaping (i.e., grassland and locally appropriate scrub plants) should be considered to be used as opposed to landscaping with lawn and exotic shrubs and trees. Native plants offer more structure, cover, food resources, and nesting substrate for wildlife than landscaping with lawn and ornamental trees. Native plant landscaping has been shown to increase the abundance of arthropods which act as importance sources of food for wildlife and are crucial for pollination and plant reproduction (Narango et al. 2017, Adams et al. 2020, Smallwood and Wood 2022.). Further, many endangered and threated insects require native host plants for reproduction and migration, e.g., monarch butterfly. Around the world, landscaping with native plants over exotic plants increases the abundance and diversity of birds, and is particularly valuable to native birds (Lerman and Warren 2011, Burghardt et al. 2008, Berthon et al. 2021, Smallwood and Wood 2022). Landscaping with native plants is a way to maintain or to bring back some of the natural habitat and lessen the footprint of urbanization by acting as interconnected patches of habitat for wildlife (Goddard et al. 2009, Tallamy 2020). Lastly, not only does native plant landscaping benefit wildlife, it requires less water and maintenance than traditional landscaping with lawn and hedges.

Thank you for your consideration,

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Shawn Smallwood, Ph.D.

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