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BY E-MAIL ONLY

May 18, 2020

Planning Commission Chair Kristina Sturm
Members of the Planning Commission
Planners: Greg Wolff (gwolff@lovelafayette.org); Nancy Tran (ntran@lovelafayette.org)
c/o City Clerk Joanne Robbins, CMC (JRobbins@ci.lafayette.ca.us)
City of Lafayette
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Re: L03-11 Terraces of Lafayette

Planning Commission Chair Sturm and Honorable Members of the Planning Commission:

I am writing on behalf of Save Lafayette, a non-profit organization composed of residents living in and around the City of Lafayette ("City") concerning the proposed Terraces of Lafayette Project ("Project") proposed to be constructed at the southwest corner of Pleasant Hill and Deer Hill Roads by the O'Brien Land Company, LLC ("Developer"). The City made the 2020 CEQA Addendum ("2020 Addendum") available to the public on May 4, making it impossible to submit these comments any earlier than today's date. Since the City has elected not to prepare a Subsequent Environmental Impact Report ("SEIR"), there has been no formal 30-day comment period, and no opportunity for comments and response to comments as is typical under the California Environmental Quality Act ("CEQA"). As discussed below, we are opposed to the Project in its current form for several reasons:

1. As discussed in our letter of May 11, 2020, we urge the City to continue the Planning Commission hearing currently scheduled for May 18, 2020 until after the lifting of the COVID-19 State of Emergency. This is a highly controversial Project that has been years in the planning. It is not possible for the interested public to adequately participate in the decision-making process during the State of Emergency.

2. The City can and should deny approval of the Project because it admittedly has numerous significant unmitigated impacts. When a Project has significant unmitigated impacts, the City may decline to approve the Project with a finding that its environmental impacts outweigh its economic benefits. (CEQA §21081(a), (b)). This is an inherently political decision that will not be set aside by the courts so long as it is supported by substantial evidence. (*Concerned Citizens of South Central LA v. Los Angeles Unif. Sch. Dist*. (1994) 24 Cal.App.4th 826, 847). The Housing Accountability Act expressly requires CEQA compliance, and does not preempt the City's authority under CEQA. (Gov. Code sect. 65589.5(e); 65589.5(o)(6)).

3. A subsequent environmental impact report is required for the Project because it has new significant impacts that were not analyzed in the 2013 EIR; there are new mitigation measures that are feasible today that were not feasible in 2013; and there are impacts that are more severe today than analyzed in the 2013 EIR, including but not limited to the following:

    a. Wildlife biologist Dr. Shawn Smallwood, Ph.D., visited the site on May 10, 2020. Dr. Smallwood identified six special status species on the site which will be adversely impacted by the Project. (Exhibit A). The 2013 EIR and 2020 Addendum erroneously state that there are no special status species on the site.
    b. The Project requires destruction of 10 more mature trees that are protected by the City's Tree Preservation Ordinance than the Project analyzed in the 2013 EIR. This is a significant new impact of the Project that did not exist in 2013.
    c. The Project proposes to add a new southbound lane on Pleasant Hill Road, which will cause a conflict with the Gateway Constraints policy.
    d. The Project fails to preserve wildrye areas, in violation of mitigation measures imposed on the 2013 EIR.
    e. The Addendum fails to analyze impacts on indoor air quality due to air pollution from adjacent Highway 24, and air pollution from composite wood products, despite the fact that this hazard was analyzed in the 2018 Addendum prepared by the Developer;
    f. The Addendum fails to analyze wildfire risks, in violation of Section XX of CEQA Guidelines Appendix G, adopted in 2019. This risk is heightened since 2013, and highlighted by the fall 2019 fire that destroyed the Lafayette Tennis Club. An SEIR is required to analyze this risk, and whether the Project exacerbates risks related to evacuation, emergency vehicle access, adequacy of fire suppression water, etc.

g. The Project has significant new traffic impacts that are more severe than analyzed in the 2013 EIR due to changed circumstances.
h. The Project is different than the Project described in the 2013 EIR. The Project is reconfigured such that it no longer preserves wildrye areas, it requires destruction of 10 additional mature trees, and includes an extra lane on southbound Pleasant Hill Road. CEQA requires that the Project being approved must be analyzed in the EIR not some other project. CEQA requires a "stable, accurate and finite" project description. The city has presented a moving target.

A subsequent EIR is required to analyze the above impacts and to propose feasible mitigation measures and to consider feasible alternatives to reduce these and other impacts. This is clearly significant new information that was not known and could not have been known in 2013, which necessitates an SEIR. Thus, the addendum prepared for the Project is inadequate.

4. The City should not even reach issues under the Housing Accountability Act ("HAA") until a legally adequate CEQA document is prepared. CEQA must be completed prior to any Project approval, and the HAA expressly preserves the City's authority under CEQA. (Gov. Code sect. 65589.5(e), 65589.5(o)(6)). If the City nevertheless decides to consider the HAA, the City is not compelled to approve the Project under the HAA for several reasons:

   a. The Project "would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact." (Gov. Code sect. 65589.5(d)(2)).
   b. The Project "is inconsistent with both the jurisdiction's zoning ordinance and general plan land use designation as specified in any element of the general plan as it existed on the date the application was deemed complete, and the jurisdiction has adopted a revised housing element in accordance with Section 65588 that is in substantial compliance with this article." (Gov. Code sect. 65589.5(d)(5)).
   c. There has been an intervening change in the number of units in the proposed project of more than 20%, from 315 units to 44 units, thereby rendering the 2013 proposal void. As a result, the Project must comply with the current General Plan and zoning, which it does not. (Gov. Code sect. 65589.5(o)(2)(E)).
   d. The City has failed to comply with CEQA because a Subsequent EIR is required for the Project. (Gov. Code sect. 65589.5(e), 65589.5(o)(6)).

For the above reasons, we urge the Commission to continue consideration of this matter, and to require preparation of a Subsequent EIR before any further consideration of the Project.

PROJECT DESCRIPTION

The proposed project ("Project") consists of a multi-unit residential housing project at the southwest corner of Deer Hill Road and Pleasant Valley Road known as Terraces of Lafayette, which would include 315 residential units within 14 buildings and a clubhouse building on 22.27 acres of land. The Project would require removal of 101 of 117 protected trees from the Project site, destruction of one of the largest valley oaks in the City (58-inches), and destruction of 2 acres of native blue wildrye. The Project site includes a lush riparian woodland habitat, which is home to several protected species. Project construction requires 500,000 cubic yards of earth movement.

A somewhat similar project was proposed by the same Developer in 2011 ("2011 Project"). The City Council certified the final EIR for that version of the project in August 12, 2013. ("2013 EIR"). The 2013 EIR found that the 2011 Project would have 13 significant unmitigated environmental impacts in five different subject areas of aesthetics, air quality, biological resources, land use and planning, and transportation.

On December 9 2013, the developer abandoned the 2013 Project and submitted a very different project for approval, known as the Homes at Deer Hill. ("2013 Project"). The 2013 Project included only 44 homes, preserved many of the protected trees on site and blue wildrye, including the 58-inch Great Oak tree. The City certified a new EIR for the 2013 Project. However, on June 5, 2018, the voters of the City rejected the 2013 Project by referendum, following successful litigation against the City's effort to thwart the voter's attempt to exercise their Constitutional rights. (*Save Lafayette v. City of Lafayette* (2018) 20 Cal.App.5th 657).

On June 15, 2018, the developer proposed the current Project. The current proposal has some similarities to the 2011 Project, but also many significant differences, including, but not limited to, the following:

- The current Project, requires destruction of 10 more protected tress than the 2011 Project,
- The current Project destroys more blue wildrye than the 2011 Project,
- The current Project requires a new southbound lane on Pleasant Hill Road, unlike the 2011 Project,
- The current Project does not include a median break on Pleasant Hill Road,

- The current Project extends the northbound left-turn lane at Pleasant Hill Road and Deer Hill Road/Stanley Blvd., to Acalanes Avenue,
- The current Project generates higher noise levels than the 2011 Project at nearby sensitive receptors such as home and the nearby Acalanes High School.

In 2018, the Developer submitted a CEQA Addendum for the Project prepared by consultant, First Carbon. ("2018 Addendum"). The City retained an independent consultant to review the 2018 Addendum. The independent consultant determined that the 2018 Addendum was legally inadequate, and that a Subsequent EIR was required due to changed circumstances since the 2013 EIR was certified. (See, Letter from A. Coon, Exhibit B). However, after threats of litigation from the developer's attorney, (Exhibit B) the City changed course, and decided to prepare a new CEQA Addendum, which was released on May 4, 2020. ("2020 Addendum").

BROWN ACT

As discussed in our letter of May 11, 2020, we ask the City to continue consideration of the Project until after the COVID-19 State of Emergency is lifted. The state of emergency makes it impossible for the public to actively participate in public meetings at which the Project will be considered. Since the Project does not pose any emergency, there is no reason that its consideration cannot be continued until after the state of emergency is lifted and the City is once again able to conduct regular meetings with public attendance. Many residents would like to address the Planning Commission, but City Staff has made clear that there will be no opportunity for the public to make oral comments to the Commission, in violation of the Brown Act. We incorporate the May 11, 2020 letter herein by reference.

CEQA

A subsequent environmental impact report ("SEIR") is required pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000, et. seq.

A. LEGAL STANDARD.

1. CEQA Section 21166 Does not Apply at All Because the 2013 EIR was Never Subject to Challenge.

The City applies the lenient "substantial evidence" standard of CEQA section 21166 and CEQA Guidelines section 15162 to its determination of whether a SEIR is required. However, those sections do not apply at all because the 2013 EIR was never

subject to challenge until now. In the seminal case of *Benton v. Bd. of Supervisors*, 226 Cal. App. 3d 1467, 1479–80 (1991), the court explained, "In a case in which an initial EIR has been certified, section 21166 comes into play precisely because in-depth review of the project has already occurred, **the time for challenging the sufficiency of the original CEQA document has long since expired** and the question before the agency is whether circumstances have changed enough to justify repeating a substantial portion of the process."

However, although the City certified the 2013 EIR, the City never granted final approvals for the 2013 Project because the developer withdrew the 2013 Project and submitted the 2013 Project (Deer Hill). The minutes of the August 12, 2013 city council hearing make clear that the council certified the EIR, but did not approve the project. Since the 2011 Project never received final approval, any CEQA challenge to the 2013 EIR would not have been ripe. In the case of *Coal. for Clean Air v. City of Visalia*, 209 Cal. App. 4th 408, 423-26 (2012), the court held that a notice of determination may not be filed until the CEQA document is approved and the project receives final approval. Any challenge cannot be brought until after project approval. Since the 2011 Project never received final approval, the 2013 EIR could not have been challenged – until now. Since "**the time for challenging the sufficiency of the original CEQA document has [NOT] long since expired** " CEQA section 21166 and CEQA Guidelines section 15162 do not apply at all. Rather, the 2013 EIR may be challenged now for the first time pursuant to the standards of review for challenging an EIR. Any other rule would allow a city to certify an EIR, wait 180 days, then approve the underlying project, and argue that the EIR must be challenged under section 21166 rather than using the court's independent judgment.

In the recent case of *Sierra Club v. Cty. of Fresno*, 6 Cal. 5th 502, 516, 431 P.3d 1151, 1162 (2018), the Supreme Court explained that in reviewing an EIR, the court must review the EIR's adequacy as an informational document using the stringent de novo review standard, not the lenient substantial evidence standard. While questions of fact are subject to substantial evidence review, questions of law and failure to proceed in a manner required by law are reviewed de novo. *Id*. Since this case involves a question of the adequacy of the 2013 EIR as an informational document, the court must use de novo review, not substantial evidence review.

2. Even Under the Standards of CEQA Section 21166, an SEIR is Required.

Even under the lenient standards of CEQA section 21166 and CEQA Guidelines section 15162, an SEIR is required. The court of appeal recently stated, "The addendum is the other side of the coin from the supplement to an EIR. This section provides an interpretation with a label and an explanation of the kind of document that does not need additional public review." "It must be remembered that an addendum is prepared where

‘(2) **Only minor technical changes or additions are necessary to make the EIR under consideration adequate under CEQA; and (3) The changes to the EIR made by the addendum do not raise important new issues about the significant effects on the environment.**’ ([Guideline] 15164, subd. (a).) *Save Our Heritage Organization v. City of San Diego*, 28 Cal. App. 5th 656, 664–65 (2018) (emphasis added). Even a 15-foot increase in height for a residential building (increasing height from 75 feet to 90 feet) requires a supplemental EIR, not an addendum. “Accordingly, the appropriate protocol is to have the county draft and recirculate a focused supplemental EIR, limited solely to analysis of height and profile-related impacts of the medical clinic, as built and where built to a height of ninety feet.” *Ventura Foothills Neighbors v. Cty. of Ventura*, 232 Cal. App. 4th 429, 434, (2014).

Section 15164(a) of the CEQA Guidelines states that “the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” Pursuant to Section 15162(a) of the State CEQA Guidelines, a subsequent EIR or Negative Declaration is only required when:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    (C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

As discussed below, most of the above conditions apply, and an SEIR is therefore required.

B. ARGUMENT.

1. The City Can and Should Disapprove the Project Because it has Significant Unmitigated Environmental Impacts.

The City can and should deny approval of the Project because it admittedly has numerous significant unmitigated impacts. The 2020 Addendum concludes that the Project would have significant unavoidable impacts in at least the following areas:

- Scenic vistas including scenic resources with a State scenic highway. (2020 Addendum 25);
- Visual character. (Id. 26);
- Air quality emissions from nitrogen oxides (NOx) (Id. 30);
- Cumulative air quality impacts. (Id. 31);
- Cancer risk of 47 per million (exceeds 10 per million CEQA significance threshold). (Id. 39);
- Elimination of 2 acres of blue wildrye native grasslands. (Id. 47);
- Destruction of 101 of 117 healthy mature trees which are protected under the City's Tree Protection Ordinance, including a 58-inch valley oak (10 more than would have been destroyed by the 2013 Project). (Id. 48, 60-61);
- Greenhouse gas emissions of 2,674 metric tons/year exceed significance threshold of 1100 metric tons/year. (Id. 88).
- Land use and planning inconsistencies, including:
    - Policy LU-2.1 and 2.3 regarding density of hillside development (Id. 105, 110);
    - Policy LU-2.2 regarding clustering of develop to preserve important visual and functional open space. (Id. 106, 110);
    - Policy LU-2 regarding ensuring that development respects the natural environment and preserving the scenic quality of ridgelines, hills, creek areas, and trees. (Id. 106, 111);
    - Policy LU-20.1 regarding LOS traffic standards due to significant traffic impacts at Deer Hill Road-Stanley Blvd/Pleasant Hill Rd. intersection. (Id. 106, 111);
    - Policy LU-13 requiring eastern Deer Hill Rd. near the intersection of Pleasant Hill Rd. to be developed in a manner consistent with Lafayette's

community identify because the Project would change the semi-rural character of the Project site. (Id. 106, 112);

- Inconsistencies with Hillside Development Permit Requirements set forth in the Municipal Code. (Id. 108, 114, 117);
- Significant noise impacts. (Id. 120, 126);
- Traffic impacts on Pleasant Hill Rd. at Deer Hill Rd. (Id. 145-146, 164);
- Conflict with Gateway Constraint Policy due to widening of southbound Pleasant Hill Road. (Id. 168).

Since there is no dispute that the Project will have significant unmitigated impacts, the City may decline to approve the Project with a finding that its environmental impacts outweigh its economic benefits. (CEQA §21081(a), (b)). This is an inherently political decision that will not be set aside by the courts so long as it is supported by substantial evidence. (*Concerned Citizens of South Central LA v. Los Angeles Unif. Sch. Dist*. (1994) 24 Cal.App.4th 826, 847). As the court of appeal has explained:

> "A statement of overriding considerations reflects the final stage in the decision-making process by the public body. A public agency can approve a project with significant environmental impacts only if it finds such effects can be mitigated or concludes that unavoidable impacts are acceptable because of overriding concerns. (Pub. Resources Code, § 21081; Guidelines, §§ 15091 and 15092.) If approval of the project will result in significant environmental effects which 'are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record.' (Guidelines, § 15093, subd. (b).) These reasons constitute the statement of overriding considerations which is intended to demonstrate the balance struck by the body in weighing the 'benefits of a proposed project against its unavoidable environmental risks.' (Guidelines, § 15093, subds. (a) and (c).)" (*Sierra Club v. Contra Costa County* (l992) 10 Cal.App.4th 1212, 1222 [13 Cal.Rptr.2d 182].)

Concerned Citizens of S. Cent. L.A. v. Los Angeles Unified Sch. Dist., 24 Cal. App. 4th 826, 846 (1994). Since the question of whether the economic benefits of the project outweigh the environmental costs is ultimately a political question, Courts are loathe to set aside such decisions so long as they are supported by substantial evidence. Thus, since the Project has many significant unmitigated environmental impacts, the City may decline to issues a statement of overriding considerations and may decline to approve the Project.

The Housing Accountability Act expressly requires CEQA compliance, and does not preempt the City's authority under CEQA. (Gov. Code sect. 65589.5(e);

65589.5(o)(6)). Indeed, the HAA expressly requires the City to make findings under CEQA section 21081. Id.

2. Changes to the Project Description Require a Subsequent EIR.

An SEIR is required because the current Project is different from the 2011 Project described in the 2013 EIR. One of the most basic requirements of CEQA is that the EIR must contain "an accurate, stable and finite" project description. (*Washoe Meadows Cmty. v. Dep't of Parks & Recreation*, 17 Cal. App. 5th 277, 287, 225 Cal. Rptr. 3d 238, 245 (Ct. App. 2017), 17 Cal.App.5th at 287; *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1045 (Treasure Island); *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) The courts "have recognized that a project description that gives conflicting signals to decision makers and the public about the nature and scope of the project is fundamentally inadequate and misleading." (*Treasure Island*, 277 Cal.App.4th at 1052.) "For a project to be stable, **the DEIR, the FEIR, and the final approval must describe substantially the same project**." (*Washoe*, 17 Cal.App.5th at 288 [emphasis added].) This rule applies even months or years after an EIR has been certified. If the project description changes after EIR certification, a SEIR is required. As our Supreme Court explained, "[t]he defined project and not some different project must be the EIR's bona fide subject." (*Concerned Citizens of Costa Mesa v. 32nd Dist. Agric. Assn.* (1986) 42 Cal.3d 929, 934 (amphitheater change after EIR certification from 4000 seats to 7000 seats required SEIR.) The "question of whether the EIR's project description complied with CEQA's requirements, the standard of review is de novo." (*Stopthemillenniumhollywood.com v. City of Los Angeles*, 39 Cal. App. 5th 1, 15 (2019).)

In this case, the current Project is not the same Project as described in the 2013 EIR. The current proposal has some similarities to the 2011 Project, but also many significant differences, including, but not limited to, the following:

- The current Project, requires destruction of 10 more protected tress than the 2011 Project,
- The current Project destroys more blue wildrye than the 2011 Project,
- The current Project requires a new southbound lane on Pleasant Hill Road, unlike the 2011 Project,
- The current Project does not include a median break on Pleasant Hill Road,
- The current Project extends the northbound left-turn lane at Pleasant Hill Road and Deer Hill Road/Stanley Blvd., to Acalanes Avenue,
- The current Project generates higher noise levels than the 2011 Project at nearby sensitive receptors such as home and the nearby Acalanes High School.

The Project changes significantly increase impacts, such as destruction of 10 additional protected trees, destruction of 2 additional acres of blue wildrye, destruction of protected species habitat, and other changes. These changes to the Project description require a SEIR and are subject to de novo review, not substantial evidence review.

Even under the more lenient standards of CEQA section 21166, an SEIR is required because "Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." Cutting down 10 additional protected trees and eliminating 2 acres of protected wildrye unquestionable increase significant environmental impacts. An SEIR is required to analyze and mitigate these new impacts.

As discussed by the Developer's own lawyer, Art Coon, the changes to the Project and other changed circumstances, led the independent environmental consultant retained by the City to conclude that an SEIR was required. While the City altered that conclusion after threats of litigation by the Developer, the City cannot "unring the bell." The court in the case *Stanislaus Audobon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144 rejected a county's argument that a revised initial study prepared by the county which contradicted the findings of the first initial study had not "relegated the first initial study to oblivion." Id. at 154. The court stated, "We analogize such an untenable position to the unringing of a bell. The first initial study is part of the record. The fact that a revised initial study was later prepared does not make the first initial study any less a record entry nor does it diminish its significance, particularly when the revised study does not conclude that the project would not be growth inducing but instead simply proceeds on the assumption that evaluation of future housing can be deferred until such housing is proposed." (Id. at 154)

As the City's independent consultant concluded, an SEIR is required due to changed circumstances since the 2013 EIR was certified.

3. **New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete shows significant environmental impacts not discussed in the previous EIR.**

    a. **The Project Will Have Significant Biological Impacts.**

The 2020 Addendum (Impact Sciences 2020:45) repeats the determination in the 2013 EIR that the site supports no habitat suitable for special-status species of wildlife. However, on May 10, 2020, wildlife biologist Dr. Shawn Smallwood, Ph.D., visited the

site. (Exhibit A). Dr. Smallwood was able to identify 6 special status species on the site in about 2 and a half hours. Dr. Smallwood concluded that the creek and mature trees provide a valuable riparian habitat for many special status species. He concluded that by destroying almost all of the trees on site, the Project will cause irreparable harm to this valuable habitat. None of these impacts are analyzed in the 2013 EIR or 2020 Addendum since the documents erroneously concluded that there were no special status species on the Project site.

Dr. Smallwood directly identified the following special status species on the Project site: Osprey, Red-tailed Hawk, White-tailed kite, Cooper's hawk, and Olive-sided flycatcher. (Exhibit A, p. 3). In addition, Dr. Smallwood notes that 42 special status bird species have been identified near the Project site, and 10 special status species of mammals, amphibians and reptiles. Dr. Smallwood concludes, "The riparian woodland of the creek that forms part of the project site appears suitable for San Francisco dusky-footed woodrat, and the stream likely serves as a movement corridor for California red-legged frog, which is a California Threatened species. Multiple special-status species of bats also likely roost in the trees on site (Kunz and Lumsden 2003), and generally use the riparian corridor for movement." (Id. 5).

Dr. Smallwood concluded that the Project will adversely affect the species on the Project site through direct destruction of their habitat, and also through collisions with windows associated with the Project. Dr. Smallwood concluded that the Project will cause irreparable harm to the protected species by removing 101 of 117 mature trees on the site, which are subject to protection under the City's Tree Protection Ordinance. Dr. Smallwood states that the young replacement trees do not provide comparable habitat to the existing mature trees. (Id. 18). Since the Project destroys 10 more mature trees than the 2011 Project, it will have an even greater impact on habitat destruction than the 2011 Project.

Dr. Smallwood calculates that window collisions will cause 616 bird deaths each year as a result of the Project. (Id. p. 12). He states that if this impact were analyzed in an SEIR, mitigation would be possible through the use of bird-safe window treatments and other measures. (Id. 16).

These are significant new impacts that could not have been known at the time of the 2013 EIR. The 2013 EIR concluded that there were no special status species on the Project site. We must, at this point, assume that this was true in 2013 and that the City and the EIR consultant were not reaching false conclusions. Since the species were not on the site in 2013, but they are there now, this is an impact that was not known and could not have been known in 2013. As such an SEIR is required.

b. The Project Will Have Significant Impacts on Protected Trees.

The Project will destroy 101 of 117 mature trees on the Project Site. This is 10 more trees than would have been destroyed by the 2011 Project. These trees are protected by the City's Tree Protection Ordinance. As such, the destruction of these trees is a significant impact under CEQA. Since the Project will have a greater adverse impacts than the 2011 Project, this is a new significant impact that was not known and could not have been known in 2013 that must be analyzed in a SEIR.

Where a local or regional policy of general applicability, such as the Tree Protection Ordinance, 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 (EIR inadequate when Lead Agency failed to identify relationship of 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, 32 Cal.Rptr.3d 177; see also, *County of El Dorado v. Dept. of Transp*. (2005) 133 Cal.App.4th 1376 (fact that a project may be consistent with a plan, such as an air plan, does not necessarily mean that it does not have significant impacts).) *Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Ca1.App.4th 1, 17 ("[c]ompliance with the law is not enough to support a finding of no significant impact under the CEQA."). The recent *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358 *echoes Pocket Protectors*. These both apply the fair argument standard to a potential inconsistency with a plan adopted for environmental protection.

Thus, the fact that the Project will destroy 10 more trees protected by the City's Tree Protection Ordinance than the 2011 Project is a new impact that is significant as a matter of law. This impact could not have been known in 2013, and therefore must be analyzed in an SEIR.

c. The Project's Widening of Pleasant Hill Road is a New Significant Impact.

The current Project, unlike the 2011 Project, proposes to add a new southbound lane to Pleasant Hill Road, beginning north of Deer Hill Road and extending south to become a trap lane for the SR-24 westbound on-ramp. (2020 Addendum p. 169). The

2020 Addendum admits that the new lane "would conflict with the Gateway Constraint Policy of the Lamorinda Action Plan." (Id.)

As discussed above, the conflict with a plan or ordinance is a significant impact under CEQA that must be analyzed and mitigated in an EIR. Since the 2011 Project did not include this traffic lane, it was not analyzed in the 2013 EIR, nor could it have been. As such, this is a new significant impact that must be analyzed in an SEIR.

d. The Project will have Significant Indoor Air Quality Impacts.

The Project will have significant impacts related to indoor air quality that have not been addressed in the 2013 EIR or the 2020 Addendum. Oddly, these impacts were analyzed in the developer's 2018 Addendum, and mitigation measures were proposed, but those mitigation measures are not included in the 2020 Addendum.

The 2018 Addendum concludes that future residents of the Project will suffer a cancer risk of over 51 per million due largely to the Project's adjacency to SR-24. (2018 Addendum 43 (https://www.lovelafayette.org/Home/ShowDocument?id=5674)). This exceeds the Bay Area Air Quality Management District (BAAQMD) CEQA significance threshold of 10 per million by over five hundred percent. Id. Therefore, this is a significant impact within the meaning of CEQA.[1] As a result the 2018 Addendum recommends a mitigation measure of requiring MERV 13 air filtration, which would allegedly reduce the impact to less than significant levels. (2018 Addendum 46).

The 2020 Addendum ignores this impact identified in the 2018 Addendum entirely, and relies on the analysis from the 2013 EIR. (2020 Addendum 30). But, as discussed above, the City cannot relegate the 2018 Addendum to oblivion simply by ignoring its conclusions. The City cannot "unring the bell." (*Stanislaus Audobon Society, Inc. v.*

[1] Such air quality thresholds are treated as dispositive in evaluating the significance of a project's air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"). The California Supreme Court recently made clear the substantial importance that a BAAQMD significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist*. (2010) 48 Cal.4th 310, 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact").

County of Stanislaus (1995) 33 Cal.App.4th 144.) Therefore, the impact remains significant and unmitigated. The 2020 Addendum relies on the mitigation measures from the 2013 EIR, which are MERV 9-12 filtration. (2020 Addendum 30, 40, 43). However, the 2018 Addendum found that this mitigation failed to reduce the impact to less than significant, and that much more stringent MERV 13 or higher was required. These conflicting conclusions create a fair argument of a significant impact that must be analyzed in an SEIR. The impact must be analyzed and mitigated in an SEIR to safeguard the health of future residents of the Project. Furthermore, the SEIR should analyze more stringent mitigation measures which are available and feasible, such as MERV 16 air filtration, which would further reduce pollution levels. These mitigation measures were not feasible at the time of the 2013 EIR, so this constitutes new mitigation measures that were not feasible at the time of the prior EIR that must be analyzed in an SEIR to mitigate a significant impact.

In any case, MERV filters do now work at all if residents open their windows, or engage in outdoor activities. Since the Project includes operable windows, and outdoor recreation areas, the City cannot conclude that MERV filtration will mitigate air pollution to less than significant levels. Residents and guests may be exposed to very high levels of cancer-cause air pollution from nearby SR-24 when their windows are open and when they are recreating outdoors. This risk is heightened since respiration levels or much higher during outdoor recreation activities then when relaxing indoors.

In addition, neither the 2013 EIR, the 2018 Addendum, nor the 2020 Addendum analyzed the impacts of formaldehyde emissions from composite wood products. This impact was not widely known until 2015 – after the publication of the 2013 EIR. Therefore, it is a new significant impact, which exacerbates the indoor air quality impacts identified in the 2018 Addendum.

Formaldehyde is a known human carcinogen. Many composite wood products typically used in residential and office building construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential and office building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims. Given the prominence of materials with formaldehyde-based resins that will be used in constructing the Project and the residential buildings, there is a significant likelihood that the Project's emissions of formaldehyde to air will result in very significant cancer risks to future residents and workers in the buildings. Even if the materials used within the buildings comply with the Airborne Toxic Control Measures (ATCM) of the California Air Resources Board (CARB), significant emissions of formaldehyde may still occur.

The residential buildings will have significant impacts on air quality and health risks by emitting cancer-causing levels of formaldehyde into the air that will expose workers and residents to cancer risks well in excess of BAAQMD's threshold of significance. A 2018 study by Chan et al. (attached as Exhibit C) measured formaldehyde levels in new structures constructed after the 2009 CARB rules went into effect. Even though new buildings conforming to CARB's ATCM had a 30% lower median indoor formaldehyde concentration and cancer risk than buildings built prior to the enactment of the ATCM, the levels of formaldehyde will still pose cancer risks greater than 100 in a million, well above the 10 in one million significance threshold established by the BAAQMD.

Based on expert comments submitted on other similar projects and assuming all the Project's and the residential building materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure, future residents and employees using the Project will be exposed to a cancer risk from formaldehyde greater than the BAAQMD's CEQA significance threshold for airborne cancer risk of 10 per million. Currently, the City does not have any idea what risk will be posed by formaldehyde emissions from the Project or the residences.

The City has a duty to investigate issues relating to a project's potential environmental impacts. (*See County Sanitation Dist. No. 2 v. County of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98. ["[U]nder CEQA, the lead agency bears a burden to investigate potential environmental impacts."].) "If the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record. Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.) Given the lack of study conducted by the City on the health risks posed by emissions of formaldehyde from new residential projects, a fair argument exists that such emissions from the Project may pose significant health risks. As a result, the City must prepare a SEIR which calculates the health risks that the formaldehyde emissions may have on future residents and identifies appropriate mitigation measures.

The 2020 Addendum contends that impacts on future residents of the Project are not an impact cognizable under CEQA. (2020 Addendum 44). This is based on an erroneous reading of *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA*"). The failure to address the project's indoor air quality impacts is contrary to the California Supreme Court's decision in *CBIA*. At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. *CBIA*, 62 Cal.4th at 800-801. However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. *Id*. at 801 ("CEQA calls upon an agency to evaluate existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language requires lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects***

on the environment." *Id*. at 800 (emphasis added).) Here, the Project exacerbates the indoor air quality impacts of SR-24 by adding emissions of formaldehyde, creating a "toxic soup." Therefore, the impact must be analyzed in an SEIR.

e. The Project will have Significant Impacts Related to General Plan and Zoning Inconsistency.

There is not dispute that the Project fails to comply with the current General Plan and Zoning designation for the property, which limit development to no more than 14 units. Although the City staff and developer argue that the prior zoning applies to the site pursuant to the HAA, this point is irrelevant under CEQA. CEQA requires a Project to analyze any inconsistencies with the General Plan and Zoning requirements and such inconsistencies are significant impacts under CEQA. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist*. (2009) 176 Cal. App. 4th 889, 918).

Since the General Plan and Zoning changed on the parcel in 2018, this is a significant new impact that was now known and could not have been known in 2013. As such an SEIR is required to analyze and mitigate this impact through consideration of mitigation measures and project alternatives.

f. The Project will have Significant Wildfire Impacts.

In 2019, the California Office of Planning and Research (OPR) amended the CEQA Guidelines to add Section XX, concerning wildfire impacts. Section XX requires analysis of whether a proposed project would:

- "Substantially impair an adopted emergency response plan or emergency evacuation plan";
- "Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire";
- "Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment"; or
- "Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes."

In the fall of 2019, the immediate project area suffered a catastrophic fire that destroyed the nearby Lafayette Tennis Club. The Project site is depicted within Very High Fire Hazard Severity Zones on the City of Lafayette adopted map that depicts compiled date from the Contra Costa County Fire Protection District fire hazards map and CAL

FIRE. (2020 Addendum 188). The area to the east of the Project site across Pleasant Hill Road is designated by the City's Emergency Operation Plan as Zone 6. The Quandt Road toward Pleasant Hill Road is the designated evacuation route for this zone. The evacuation route for the Project would be Pleasant Hill Road and/or Deer Hill Road. (Id. 188).

Since the time of the 2013 EIR, many changes have occurred increasing the risks of wildfires in the area, including:

- Ordinance 620 was enacted by the city, establishing a very high fire hazard severity zone for the property and adjacent area;
- Climate change and/or a developing long-term dry period have worsened fire risk, and increasingly severe fire events have caused significant loss of life and property damage in northern California in recent fire seasons, including, but not limited, to the major fires in Sonoma and Napa Counties, and the Paradise fire;
- Pleasant Hill Road, under these developing fire risk conditions, has heightened significance as a route of evacuation in the event of significant fire events;
- On or about October 27, 2019, a major fire occurred on the hillside opposite the site, destroying the Lafayette Tennis Club and adjacent hillsides, which required aerial tankers and a helicopter, and dozens of firefighters, to extinguish; a partial evacuation of residents in the area occurred;
- Pacific Gas & Electric instituted a policy of eliminating electrical service during periods of fire danger conditions, which resulted in service being shut off in parts of Lafayette for a number of days in Fall, 2019, including the areas around the site, and resulted in traffic signalization being inoperable in certain locations, including around the site; it is expected that this policy will continue in the foreseeable future;
- As a result, the traffic impacts of the project under these conditions have not been evaluated in the EIR, nor the so-called Addendum released May 4, 2020. The infrequent but severe risks of these conditions, particularly when and if traffic signalization is inoperable and/or evacuation of residents occurs, have not been evaluated;
- The unstudied traffic impacts include: (1) what will be the impacts of the project, and will emergency responders and residents be delayed further during commute times when PGE ceases supplying electrical service during fire conditions and the traffic signal at Pleasant Hill Road and Deer Hill ceases to function? Will this increase the public health and safety risks by delay to police, medical responders, and fire personnel? Will the 'opticom'

> system referenced in the Addendum be ineffective if the signal is non-functional? No mitigation for these risks has been proposed in the EIR or May 4, 2020 Addendum. (2) What will be the impacts of the project when a fire emergency event occurs, and major evacuation becomes necessary, potentially with the traffic signal at Pleasant Hill Road and Deer Hill ceasing to function? Will there be increased public health and safety risks? Again, will the 'opticom' system referenced in the Addendum be ineffective? No mitigation has been proposed for this infrequent but severe health and safety risk in the EIR or May 4, 2020 Addendum.

To mitigate the risk that the Project may interfere with emergency vehicle access to areas north of the project, the 2020 Addendum proposes that the Project will contribute its "fair share" to the cost of a signal optimization equipment intended to clear traffic for emergency vehicles. (Id. 190). Such systems are known as "Opticom" or "EVP."

This mitigation measure is inadequate to mitigate the Project's adverse impacts related to interference with emergency evacuation. Elite Transportation Group (ETG) has prepared an independent traffic analysis. (Exhibit D). Elite states that "EVP equipment (e.g. Opticom) can help reduce emergency response time under non-congested or slightly-congested traffic conditions. However, for a congested and gridlocked arterial such as Pleasant Hill Road during the peak hours, the impact on emergency response time due to additional congestion caused by the proposed project is unlikely to be fully mitigated by installing EVP equipment. No analysis is the updated traffic report has shown emergency response time reduction by using EVP equipment on Pleasant Hill Road. Therefore, this impact is deemed significant and unavoidable." (Exhibit D, 5-6).

An SEIR is required to analyze and mitigate the impacts of the Project on wildfire evacuation risks, to analyze the effectiveness of the Opticom system, and to study other feasible mitigation measures or alternatives.

Also, Pacific Gas and Electric has adopted a recent policy to shut down electricity in the area during times of high wildfire risk. PG&E implemented this policy with regularity this past year. The Opticom system (and other traffic signalization) will not work if the electricity is shut down. An SEIR must analyze this risk and determine if there are possible mitigation measures such as back-up power systems.

Furthermore, there is no assurance that the Opticom system will actually be installed. The Project is required only to pay its "fair share" of the costs of the system. However, it is unclear where and whether the remaining funds required to pay for the system will be secured. If not, the system may never be installed and the impact will remain significant.

Mitigation fees are not adequate mitigation unless the lead agency can show that the fees will fund a specific mitigation plan that will actually be implemented in its entirety. *Napa Citizens for Honest Gov. v. Bd. Of Supervisors* (2001) 91 CallApp.4th 342 (no evidence that impacts will be mitigated simply by paying a fee); *Anderson First Coal. v. City of Anderson* (2005) 130 Ca.App.4th 1173 (traffic mitigation fee is inadequate because it does not ensure that mitigation measure will actually be implemented); *Kings Co. Farm Bureau v. Hanford* (1990) 221 Cal.App.3d 692. But see, *Save Our Peninsula Comm v. Monterey Co*. (2001) 87 Cal.App.4th 99 (mitigation fee allowed when evidence in the record demonstrates that the fee will fund a specific mitigation plan that will actually be implemented in its entirety). Therefore, the City may not conclude that the Project's payment of "fair share" mitigation will reduce the significant wildfire evacuation risks to less than significant.

g. The Project will have Significant Traffic Impacts.

Independent consulting firm, Elite Transportation Group ("Elite") has analyzed the Project and concluded that it will have significant adverse traffic impacts. (Exhibit D). Elite concludes that the Project will have more significant traffic impacts than analyzed in the 2013 EIR due to changed circumstances in the intervening seven years. Elite's conclusions differ markedly from the traffic consultant retained by the City, TJKM. However, as discussed below, the TJKM report cannot constitute "substantial evidence" since TJKM was retained by the Developer for this same Project, thereby rendering the consultant biased. Elite concludes, inter alia:

- The delay indexes used by TJKM for Pleasant Hill Road and Highway 24 are based on outdated (2013) information and therefore significantly under-estimated. Based on the correct current data, the Project would have an unmitigatable significant adverse impact on Pleasant Hill Road.
- The emergency vehicle preemption system recommended by TJKN as a mitigation measure to offset the impact of the Project on emergency vehicle access will not work during congested or peak time.
- The impacts during construction have incorrectly assumed and 8-hour workday and therefore significantly understate the impacts of dump truck traffic on local streets during the massive grading that would be required.
- The impact of the significant reduction in the size of the passenger pick-up zone on the west side of Pleasant Hill Road, south of Deer Hill Road has not been considered.
- The safety conflicts between the proposed bike lane, trap lane, loading zone and entrance driveway on Pleasant Hill Road have not been adequately reviewed.

- The property's location in VHFHSZ fire zone and the proposed Project's impact on evacuation routes and emergency first-responder access have not been considered. These are serious safety shortcomings given the very high fire risk in the area.
- The impact of the Project on the intersection of Deer Hill Road and Laurel Drive has not been considered.

The above are all significant new impacts that were not analyzed in the 2013 EIR and require analysis and mitigation in an SEIR.

The City retained traffic consulting firm TJKM. However, this firm was retained directly by the developer of this Project for the 2018 Addendum. As a result, TJKM is biased and its conclusions do not constitute substantial evidence. A negative declaration must reflect the lead agency's "independent judgment." CEQA provides that "Any . . . mitigated negative declaration prepared pursuant to the requirements of this division shall be prepared directly by, or under contract to, a public agency." (CEQA §21082.1.) The section states further that the mitigated negative declaration must "reflect the independent judgment of the lead agency." Id. CEQA Guidelines §15074 requires negative declarations to "reflect the lead agency's independent judgment and analysis."

Relying on this provision, the courts have held that responses to comments prepared by an attorney for a project applicant failed to reflect the "independent judgment" of the lead agency due to the inherent bias of the applicant's attorney. The courts have noted that allowing the applicant's attorney to prepare responses to comments makes the lead agency "clearly captive" to the applicant. While some cases have allowed an independent consultant hired by the applicant to prepare EIRs, none of these cases have involved negative declarations. While CEQA Guideline §15084 allows the applicant's consultant to prepare a draft EIR, this provision expressly applies only to EIRs and not to negative declarations. There is no parallel provision for negative declarations. To the contrary, CEQA Guidelines §15074 requires negative declarations to "reflect the lead agency's independent judgment and analysis." Also, an independent consultant, much like an independent outside auditing firm, has independence from the project applicant.

An addendum is more akin to a negative declaration than an EIR. Unlike an EIR, a negative declaration and addendum do not have extensive public comment periods and mandatory responses to comments. Therefore, it is of great importance that the analysis be conducted by an unbiased consultant.

Therefore, the City must prepare an SEIR to analyze the Project's significant traffic impacts, and to proposed feasible mitigation measures. The analysis by TJKM is biased and inaccurate.

h. A Subsequent EIR is Required Because the Addendum Eliminates Mitigation Measures Imposed by Prior CEQA Documents.

An SEIR is required because the 2020 Addendum eliminates mitigation measures required by prior CEQA documents. For example the Deer Hill EIR required "real time" air monitoring to monitor construction dust. Despite the fact that the proposed Project will involve much more earth moving, excavation and dust creation than the Deer Hill project, the 2020 Addendum fails to include this measure. Similarly, the 2020 Addendum substantially weakens mitigation measure BIO-5 from the 2013 EIR, which required on-site preservation of stands of wildrye. (2020 Addendum 66).

If the agency fails to implement mitigation measures required by a prior EIR, this requires CEQA review, even for an otherwise ministerial project. (*Katzeff v. Dept. of Forestry* (2010) 181 Cal.App.4th 601, 611, 614; *Lincoln Place Tenants v. City of Los Angeles* (2005) 130 Cal.App.4th 1491, 1507-1508). The purpose of this requirement "is to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded*." (Federation of Hillside and Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1260-1261). The decision to abandon an adopted mitigation measure is a discretionary decision.

An agency fails proceed in a manner required by law when it fails to comply with adopted CEQA mitigation measures. (*Lincoln Place*, 130 Cal.App.4th at 1508, 1510 ("[h]aving placed these conditions . . . the city cannot simply ignore them. Mitigating conditions are not mere expressions of hope . . . [i]n the present case the city failed to proceed according to law . . The *Katzeff* Court held at p. 614 "that where a public agency has adopted a mitigation measure for a project, it may not authorize destruction or cancellation of the mitigation –whether or not the approval is ministerial . . ."

Furthermore, in *Katzeff*, 118 Cal.App.4th at 606, the original mitigation conditions were twenty years old. It is the granting of the new permit, ministerial or not, that triggers the CEQA violation. In *Katzeff*, mitigation conditions from timber harvesting plans dated 1988 and 1998 were at issue. In 2008, real party filed an application to convert the timberland to an orchard. Id. at 607. The permit conversion was ministerial, but the Court held that the twenty year old measures must be enforced and stayed real party's project. Id. at 615. Otherwise, "any mitigation required by CEQA . . . could be nullified simply by the passage of time . . . " Id. at 611. "We see no principled distinction between a conversion exemption sought immediately after the right to harvest under a THP has expired, and one sought a decade later. Whether or not the legal right to harvest timber has expired, the environmental effects are presumed to remain." Id. at 612.

In *Lincoln Place*, 130 Cal.App.4th at 1498, the original mitigation conditions were at least seven years old. There, the mitigation conditions for a renovation project were in a 1995 EIR. Id. In 2002, in connection with "ministerial" building permits, a dispute arose as to whether the mitigation conditions were to be followed. The City said no. Id. The Court of Appeal disagreed, and held that the City "failed to proceed according to law" under CEQA by granting the permits absent compliance with the (by then) ten year old mitigation conditions "without stating a legitimate reason for ignoring those measures and without preparing and circulating a supplemental EIR." Id. at 1510. The Court issued a permanent injunction against real party's project until the City did so. Id.

Since the 2020 Addendum eliminates mitigation measures imposed by prior CEQA documents, an SEIR is required to analyze the impacts of the elimination of these measures and to propose feasible mitigations and alternatives.

HOUSING ACCOUNTABILITY ACT

The City should not consider issues under the Housing Accountability Act (HAA) at all until a subsequent EIR is prepared. The HAA expressly requires CEQA compliance. (Gov. Code sect. 65589.5(e), 65589.5(o)(6)). CEQA review must be completed prior to any project approval. Requiring early consideration of environmental impacts allows the decision-maker to require more environmentally beneficial project alternatives or mitigation measures at a point when true flexibility remains. The courts have stated that CEQA is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (*County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810). CEQA requires environmental factors to be considered at the "earliest possible stage . . . before [the project] gains irreversible momentum," (*Bozung v. Local Agency Formation Comm*., (1975)13 Cal.3d 263, 277), "at a point in the planning process 'where genuine flexibility remains.'" (*Sundstrom v. Mendocino County*, (1988) 202 Cal.App.3d 296, 307). Since adequate CEQA review has not been conducted, the City should not grant any Project approvals and need not consider the HAA at this point.

If the City nevertheless decides to proceed with consideration of the HAA, Save Lafayette urges the City to reject the Project for several reasons.

First, the HAA expressly requires compliance with CEQA. (Gov. Code sect. 65589.5(e), 65589.5(o)(6)). As discussed above, the Project fails to comply with CEQA. The City may therefore not make the findings necessary to issue a statement of overriding considerations which is necessary given the Project's numerous significant unmitigated impacts.

Second, the HAA provides that the City may decline to approve the Project if it has significant unmitigated effects on public health and safety. (Gov. Code sect. 65589.5(d)(2)). As discussed above, the Project has numerous significant unmitigated impacts on public health and safety. The Project will expose residents to cancer risks far above applicable significance thresholds. The Project will create risks of interference with wildfire evacuation routes. The Project will create traffic impacts, including impacts related to traffic safety. Although the Staff Report contends that traffic impacts are not health and safety impacts, this is patently false, since the evidence shows that traffic impacts will interfere with wildfire evacuation and emergency vehicle access, and will also cause risks of vehicular accidents and pedestrian safety impacts. There are not merely issues of convenience. These are all public health and safety impacts which provide ample basis for the City to reject the Project.

Third, the HAA provides that the City may decline to approve the Project if it is inconsistent with the General Plan and Zoning as it existed at the time the application was "deemed complete." (Gov. Code sect. 65589.5 (d)(5).) The developer contends that the application was deemed complete in 2011 and that the Project was consistent with the General Plan and Zoning as it existed in 2011. As discussed in the attached letter from former Lafayette Planning Commissioner Guy Atwood, the Project failed to comply with the General Plan and Zoning even in 2011. (Exhibit E). Mr. Atwood was the Chair of the 2002 General Plan Advisory Committee that wrote the General Plan. Mr. Atwood explains that the APO zoning existing in 2011 required the area to remain semi-rural, and to protect the natural and scenic quality of the hillsides and ridgelines. The 2020 Addendum concludes that the Project fails to comply with nearly identical requirements of the current General Plan. Therefore, even if the developer is correct, and the 2011 General Plan applies, the Project is inconsistent with that version of the General Plan and Zoning and the City may reject the Project.

Fourth, under the HAA, the City must apply the current General Plan and Zoning if the developer amended the project since the time it was "deemed complete" to change the number of units by more than 20%. The HAA provides that the current General Plan and Zoning apples if, "The housing development project is revised following submittal of a preliminary application pursuant to Section 65941.1 such that the number of residential units or square footage of construction changes by 20 percent or more." (Cal. Gov't Code § 65589.5 (o)(2)(E)). Since the Project was "deemed complete" in 2011, the developer changed the Project into the Deer Hill Project, which had only 44 units. This Deer Hill project resulted in much more than 20% reduction in the number of units. Then, in 2018, the developer changed the Project again, increasing the number of units back to 315. Again, this is an increase of more than 20%. These changes of more than 20% require application of the current General Plan and Zoning under Section 65589.6 (o)(2)(E) of the

HAA. There is no dispute that the Project fails to comply with the current General Plan and Zoning and the City must therefore reject the Project. (Gov. Code sect. 65589.5 (d)(5).)

Fifth, more than 2.5 years have passed since the 2011 Project was approved. Cal. Gov't Code § 65589.5 (o)(2)(D)). The HAA provides that the developer cannot rely on the prior General Plan and Zoning if it fails to commence construction within two and a half years of receiving approval for the Project. The intent of this provision is to encourage developers to construct affordable housing as quickly as possible, rather than sitting on entitlements indefinitely, as has occurred in this case. The HAA provides that the developer may not rely on the prior General Plan and Zoning if: "The housing development project has not commenced construction within two and one-half years following the date that the project received final approval." (Cal. Gov't Code § 65589.5 (o)(2)(d).)

In this case, the developer and City attempt to avoid application of this provision by reliance on a so-called "Process Agreement." However, process agreements are nowhere mentioned in the HAA. Indeed, this type of agreement seems to have no meaning under any of California's land use laws. The City and developer appear to have invented the Process Agreement out of whole cloth. The City cannot rely on such an extra-legal agreement to undermine the language and purposes of the HAA – namely to ensure the timely and speedy construction of affordable housing. Allowing the use of Process Agreements would allow developers to obtain entitlements and then sit on projects for years or decades, thereby depriving the state of needed housing. This clearly is not the intent of the HAA. The Process Agreement violates Government Code section 65950 (a)(3), which requires that a CEQA lead agency must either approve or disapprove a project within ninety days of the date of certification of the EIR. This provision ensures that the EIR will not become stale, as has clearly occurred in this case. The law simply does not allow the City to put a proposed project in suspended animation for years after certification of the EIR. Since more than 2.5 years have passed since Project approval, the City must apply the current General Plan and Zoning. There is no dispute that the Project fails to comply, and the City must deny the Project.

CONCLUSION

For the above reasons, Save Lafayette asks the Planning Commission to:

1. Continue consideration of this matter until after the lifting of the COVID-19 State of Emergency;

2. Require preparation of a Subsequent Environmental Impact Report to analyze the Project's significant adverse environmental impacts, including many new significant impacts that were not analyzed in the 2013 EIR.
3. Reject the Project because it fails to quality for approval under the Housing Accountability Act.

Sincerely,

Richard Drury
LOZEAU DRURY LLP

CC: Mayor Mike Anderson (manderson@lovelafayette.org)
Council Member Susan Candell (scandell@lovelafayette.org)
Council Member Steven Bliss (sbliss@lovelafayette.org)
Council Member Cameron Burks (cburks@lovelafayette.org)
Council Member Teresa Gerringer (tgerringer@lovelafayette.org)

EXHIBIT A

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Greg Wolff
City of Lafayette
3675 Mt. Diablo Blvd. #210
Lafayette, CA 94595

14 May 2020

RE: Terraces of Lafayette

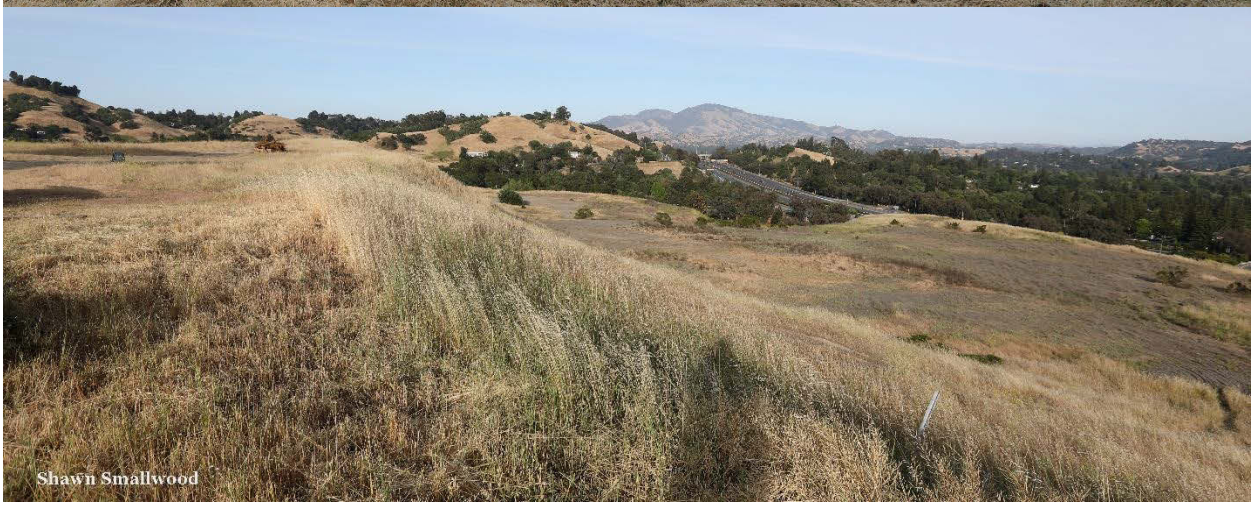
Dear Mr. Wolff,

I write to comment on Addendum (Impact Sciences 2020) to the 2013 EIR (City of Lafayette 2012) that addresses a proposed multi-unit residential housing project at the southwest corner of Deer Hill Road and Pleasant Valley Road known as Terraces of Lafayette, which I understand would add 315 residential units within 14 buildings and a clubhouse building on 22.27 acres of land. I also comment on the biological resources report prepared for this project in 2011 (Marylee Guinon and Olberding Environmental 2011).

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 subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I authored numerous papers on special-status species issues. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer 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-five years, including at many proposed project sites. My CV is attached.

SITE VISIT

I visited the site of the proposed project on 10 May 2020, walking along Deer Hill Road with a pair of binoculars for 142 minutes, starting at 17:39 hours. The site includes a wooded stream and terraced grasslands (Photos 1 and 2). The site is just south of Briones Regional Park. The mature trees on the site are suited as nest substrate for many bird species, roosting habitat for bats, and as stopover habitat for wildlife moving through the area.



Photos 1 and 2. *Views of the project site, including ample breeding and stopover habitat by both birds and bats, 10 May 2020.*

While visiting the site, I saw 23 species of birds, 5 of which are special-status species (Table 1). I also saw sign of 2 species of mammals – California voles and Botta's pocket gopher. I saw osprey fly over the site (Photo 3). Osprey are listed on California Department of Fish and Wildlife's Taxa to Watch List, and are protected by California Fish and Game Code known as 'Birds of Prey.' I watched a white-tailed kite foraging on the project site for extended periods (Photo 4). The white-tailed kite is a California Fully Protected species. I saw 2 red-tailed hawks interacting with each other and foraging on the site. From within the riparian woodland I heard the calls of a Cooper's hawk and an olive-sided flycatcher, both species of which are special-status species. Western bluebirds, chestnut-backed chickadees, house finches, American goldfinches and bushtits occupied the riparian woodland, and one of the bushtits came out to Deer Hill Rd. to check me over (Photo 5). A flock of wild turkeys crossed Deer Hill Rd. back and

forth between Briones Regional Park and the riparian corridor through the project site (Photo 6), despite the hazard posed by automobile traffic.

Evidence of breeding was abundant on site, including defense of breeding territories. Red-winged blackbirds chased off one of the red-tailed hawks, and an American crow chased off the other red-tailed hawk. Male wild turkeys gobbled and displayed. The foraging white-tailed kite was returning food to a nest site. Many of the birds were paired.

Table 1. *Species of wildlife I observed during a visit on 10 May 2020 from 17:39 to 19:32 hours at the site of the proposed project.*

Species	***Scientific name***	**Status[1]**
Wild turkey	*Meleagris gallopavo*	
Osprey	*Pandion haliaetus*	TWL, FGC 3503.5
Red-tailed hawk	*Buteo lineatus*	FGC 3503.5
White-tailed kite	*Elanus leucurus*	CFP, TWL, FGC 3503.5
Cooper's hawk	*Accipiter cooperii*	TWL, CDFW 3503.5
Eurasian collared-dove	*Streptopelia decaocto*	Non-native
Rock pigeon	*Columba livia*	Non-native
Acorn woodpecker	*Melanerpes formicivorus*	
Black-chinned hummingbird	*Archilochus alexandri*	
Olive-sided flycatcher	*Contopus cooperi*	SSC2
American crow	*Corvus brachyrhynchos*	
Common raven	*Corvus corax*	
Cliff swallow	*Petrochelidon pyrrhonota*	
Chestnut-backed chickadee	*Poecile rufescens*	
Bushtit	*Psaltriparus minimus*	
Western bluebird	*Sialia mexicana*	
American robin	*Turdus migratorius*	
European starling	*Sturnus vulgaris*	Non-native
Song sparrow	*Melospiza melodia*	
Red-winged blackbird	*Agelaius phoeniceus*	
House finch	*Haemorhous mexicanus*	
Lesser goldfinch	*Carduelis psaltria*	
American goldfinch	*Catrduelis tristis*	
California vole	*Microtus californicus*	
Botta's pocket gopher	*Thomomys bottae*	

[1] Listed as BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, FGC 3503.5 = California Fish and Game Code 3503.5 (Birds of prey), and SSC2 = California Bird Species of Special Concern priority 2, TWL = Taxa to Watch List (Shuford and Gardali 2008).

Photo 3 (left) and 4 (right). *An osprey flew over the project site (left), a white-tailed kite hunted on the site for an hour (right), 10 May 2020.*

Photos 5 and 6. *A bushtit (left) one of a flock of wild turkeys (right) on the site, 10 May 2020.*

BIOLOGICAL IMPACTS ASSESSMENT

The Addendum (Impact Sciences 2020:45) repeats the determination in the 2013 EIR (City of Lafayette 2012) that the site supports no habitat suitable for special-status species of wildlife. This determination was not believable, and as I learned from my site visit, it was incorrect. Although the 2013 EIR acknowledged that raptors and other

birds might later establish on the site, the Addendum is silent on whether any did. This silence, and the lack of a recent survey for wildlife on the project site leaves decision-makers and the public uninformed about the site's value to wildlife.

Since the 2013 EIR, several developments warrant the preparation of a supplemental EIR. One of those recent developments were changes in statutes regarding birds. For example, tricolored blackbird is now listed as a California threatened species; it was not so listed in 2013. Tricolored blackbirds forage in grasslands, often traveling far from their breeding sites to do so. In another example, most California birds are now protected by a recent amendment to California Fish and Game Code section 3513 (AB 454, signed by the Governor on 27 September 2019). This amendment protects birds that had been protected by the federal Migratory Bird Treaty Act. It covers most of the bird species I saw on site, as well as most of the birds recently reported on eBird, which I discuss next.

Another development since 2013 has been the proliferation in use of electronic data bases into which members of the public report detections of wildlife. These data bases have rapidly added to the scientific body of knowledge on the distribution of wildlife species. No impact assessment should be made without consulting these data for occurrence records at and nearby a proposed project site. However, no such use of these data bases helped to inform the 2013 EIR or its Addendum.

According to eBird records, 42 special-status species of birds have been detected nearby or within the region of the project site (Table 2), and according to iNaturalist another 10 special-status species of mammals, amphibians and reptiles have been seen near the site (Table 3). At the site, I saw or heard 5 of the special-status species of birds listed in Table 2. The riparian woodland of the creek that forms part of the project site appears suitable for San Francisco dusky-footed woodrat, and the stream likely serves as a movement corridor for California red-legged frog, which is a California Threatened species. Multiple special-status species of bats also likely roost in the trees on site (Kunz and Lumsden 2003), and generally use the riparian corridor for movement.

Another recent development has been the discovery and reporting that North American birds have suffered a 29% decline in overall abundance over the past 48 years (Rosenberg et al. 2019). This stunning loss, which remained unknown at the time of the 2013 EIR, poses dire ecological and economic consequences that have yet to be fully understood, but which must be considered in any serious cumulative impact analysis. The finding of Rosenberg et al. (2019) was reported at about the same time California's Governor signed AB 454, which was fall 2019. A supplemental EIR is needed to address the project's direct and cumulative impacts on birds protected by California Fish and Game Code section 3513, as amended.

Table 2. *Species reported on eBird (https://eBird.org) on or near the proposed project site.*

Species	**Scientific name**	**Status[1]**	**eBird post(s)**
Double-crested cormorant	*Phalacrocorax auratus*	TWL	Nearby
California gull	*Larus californicus*	TWL	Nearby
Turkey vulture	*Cathartes aura*	FGC 3503.5	Nearby
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, BCC, CE	Nearby
Golden eagle	*Aquila chrysaetos*	BGEPA, BCC, CFP	Nearby
Osprey	*Pandion haliaetus*	TWL, FGC 3503.5	Nearby
Red-tailed hawk	*Buteo jamaicensis*	FGC 3503.5	On site
Swanson's hawk	*Buteo swainsoni*	CT, BCC, FGC 3503.5	Nearby
Ferruginous hawk	*Buteo regalis*	TWL, FGC 3503.5	Nearby
Red-shouldered hawk	*Buteo lineatus*	FGC 3503.5	Nearby
Sharp-shinned hawk	*Accipiter striatus*	FGC 3503.5, TWL	Nearby
Cooper's hawk	*Accipiter cooperi*	FGC 3503.5, TWL	Nearby
Northern harrier	*Circus cyaneus*	SSC3	Nearby
White-tailed kite	*Elanus leucurus*	CFP, TWL, FGC 3503.5	On site
American kestrel	*Falco sparverius*	FGC 3503.5	Nearby
Merlin	*Falco columbarius*	FGC 3503.5, TWL	Nearby
Prairie falcon	*Falco mexicanus*	TWL, FGC 3503.5	Nearby
Peregrine falcon	*Falco peregrinus*	CE, CFP, BCC	Nearby
Great-horned owl	*Bubo virginianus*	FGC 3503.5	Nearby
Long-eared owl	*Asio otus*	SSC3	Regional
Short-eared owl	*Asio flammeus*	FGC 3503.5	Regional
Western screech-owl	*Megascops kennicotti*	FGC 3503.5	Nearby
Barn owl	*Tyto alba*	FGC 3503.5	Nearby
Burrowing owl	*Athene cunicularia*	BCC, SSC2, FGC 3503.5	Nearby
Vaux's swift	*Chaetura vauxi*	SCC2	Nearby
Costa's hummingbird	*Calypte costae*	BCC	Nearby
Allen's hummingbird	*Selasphorus sasin*	BCC	Nearby
Nuttall's woodpecker	*Picoides nuttallii*	BCC	Nearby
Horned lark	*Eremophila alpestris actia*	TWL	Nearby
Willow flycatcher	*Empidonax trailii extimus*	FE, CE	Regional
Olive-sided flycatcher	*Contopus cooperi*	SSC2	Nearby
Yellow-billed magpie	*Pica nuttalli*	BCC	Regional

Species	Scientific name	Status[1]	eBird post(s)
Purple martin	*Progne subis*	SSC2	Regional
Oak titmouse	*Baeolophus inornatus*	BCC	Nearby
Loggerhead shrike	*Lanius ludovicianus*	BCC, SSC2	Nearby
Yellow warbler	*Setophaga petechia*	SSC2, BCC	Nearby
Yellow-breasted chat	*Icteria virens*	SSC3	Nearby
Common yellowthroat	*Geothlypis trichas*	BCC	Nearby
Yellow-breasted chat	*Icteria virens*	SSC3	Nearby
Tricolored blackbird	*Agelaius tricolor*	CT, BCC	Regional
Yellow-headed blackbird	*X. xanthocephalus*	SSC3	Regional
Lawrence's goldfinch	*Spinus lawrencei*	BCC	Nearby

[1] Listed asBGEPA = Bald and Golden Eagle Protection Act, BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, CT and CE = California threatened and endangered, CFP = California Fully Protected (CFG Code 3511), FGC 3503.5 = California Fish and Game Code 3503.5 (Birds of prey), and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively, and TWL = Taxa to Watch List (Shuford and Gardali 2008).

Table 3. *Occurrence likelihoods of special-status species of terrestrial wildlife at or near the proposed project site.*

Common name	***Species name***	Status[1]	Occurrence likelihood	
			iNaturalist	Smallwood
California red-legged frog	*Rana draytonii*	CT	Nearby	Possible
Western pond turtle	*Actinemys pallida*	SSC	Nearby	Possible
Hoary bat	*Lasiurus cinereus*	WBWG Mod	Nearby	Possible
Pallid bat	*Antrozous pallidus*	SSC	Nearby	Possible
Small-footed myotis	*Myotis cililabrum*	WBWG Mod	In region	Possible
Yuma myotis	*Myotis yumanesis*	WBWG High	In region	Possible
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC	In region	Possible
Western red bat	*Lasiurus blossevillii*	SSC	Nearby	Possible
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	SSC	Nearby	Probable
American badger	*Taxidea taxus*	SSC		Probable

[1] Listed as SSC = California Species of Special Concern, and WBWG = priority listing by Western Bat Working Group.

The substantial decline of North American birds, which was discovered at about the same time California increased protection of migratory birds, also coincides with recent discoveries of the magnitude of bird-window collisions and contributing factors. The bird-window collision issue is particularly important in light of the 29% decline of birds across North America during the same time period when investigators have repeatedly identified bird-window collisions as the second or third largest anthropogenic sources of bird mortality. Neither the 2013 EIR nor the Addendum addresses this issue.

WINDOW COLLISIONS

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 Terraces at Lafayette would impose windows at a location where migratory birds likely often corner around the southeast end of Lafayette Ridge as they leave one valley structure for another (Figure 1). Birds usually choose the paths of least resistance, meaning the lowest-lying of the local terrain.

Figure 1. *Likely flight routes (white arrows) of birds migrating east-west and north-south and banking around the low reach of Lafayette Ridge, which happens to be the project site (yellow polygon). The osprey I saw was on one of these routes.*

Glass-façades of buildings intercept and kill many birds, but these façades 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, 4,404 birds were likely killed over the 52 years since the start of their study, and that's at a relatively small building façade (Figure 2). Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 50 years would have been about 13,213. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

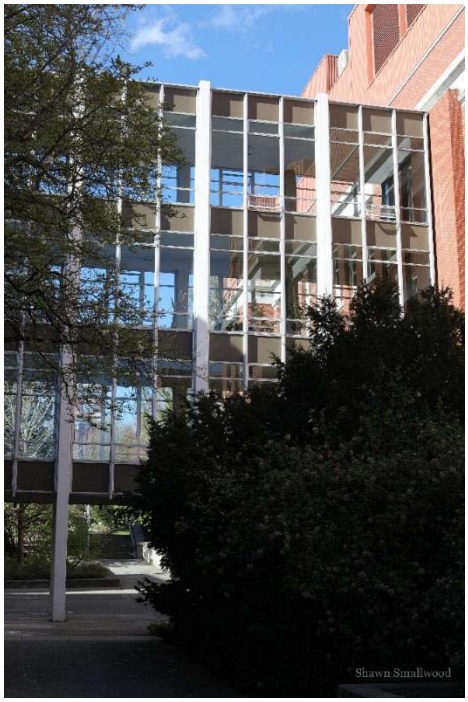


Figure 2. *A walkway connecting two buildings at Washington State University where one of the earliest studies of bird collision mortality found 85 bird fatalities per year prior to marking windows (254 annual deaths adjusted for the proportion not found). Given that the window markers have long since disappeared, this walkway has likely killed at least 12,705 birds since 1968, and continues to kill birds. Notice that the transparent glass on both sides of the walkway gives the impression of unimpeded airspace that can be navigated safely by birds familiar with flying between tree branches. Also note the reflected images of trees, which can mislead birds into seeing safe perch sites. Further note the distances of ornamental trees, which allow birds taking off from those trees to reach full speed upon arrival at the windows.*

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.

Homes with birdfeeders are associated with higher rates of window collisions than are homes without birdfeeders (Kummer and Bayne 2015, Kummer et al. 2016a), so the

developed area might pose even greater hazard to birds if it includes numerous birdfeeders. Another factor potentially biasing national or North American estimates low was revealed by Bracey et al.'s (2016) finding that trained fatality searchers found 2.6× the number of fatalities found by homeowners on the days when both trained searchers and homeowners searched around homes. The difference in carcass detection was 30.4-fold when involving carcasses volitionally placed by Bracey et al. (2016) in blind detection trials. This much larger difference in trial carcass detection rates likely resulted because their placements did not include the sounds that typically alert homeowners to actual window collisions, but this explanation also raises the question of how often homeowner participants with such studies miss detecting window-caused fatalities because they did not hear the collisions.

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) were able to incorporate 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). 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

Predicting the number of bird collisions at a new project is challenging because the study of window collisions remains in its early stages. Researchers have yet to agree on a collision rate metric. Some have reported findings as collisions per building per year and some as collisions per building per day. Some have reported findings as collisions per m^2 of window. The problem with the temporal factor in the collision rate metrics has been monitoring time spans varying from a few days to 10 years, and even in the case of the 10-year span, monitoring was largely restricted to spring and fall migration seasons. Short-term monitoring during one or two seasons of the year cannot represent a 'year,' but monitoring has rarely spanned a full year. Using 'buildings' in the metric treats buildings as all the same size, when we know they are not. Using square meters of glass in the metric treats glass as the only barrier upon which birds collide against a building's façade, when we know it is not. It also treats all glass as equal, even though we know that collision risk varies by type of glass as well as multiple factors related to contextual settings.

Without the benefit of more advanced understanding of window collision factors, my prediction of project impacts will be uncertain. Klem's (1990) often-cited national estimate of avian collision rate relied on an assumed average collision rate of 1 to 10 birds per building per year, but studies since then have all reported higher rates of collisions: 12 to 352 birds per building per year. Because the more recent studies were likely performed at buildings known or suspected to cause many collisions, collision rates from them could be biased high. By the time of these comments I had reviewed

and processed results of bird collision monitoring at 181 buildings and façades for which bird collisions per m^2 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, Schneider et al. 2018). These study results averaged 0.077 bird deaths per m^2 of glass per year (95% CI: 0.04-0.11).

The 2013 EIR and Addendum provide insufficient details needed for measuring the extent of windows in the project, but artistic renderings of the project on a website (https://www.terracesoflafayette.com/) depicts ample use of transparent and reflective windows. Looking over the proposed project design, and assuming 20 m^2 of glass windows per residential unit (a typical home would include 28 m^2 of glass windows), I estimated the buildings would include at least 8,000 m^2 of glass windows, which applied to the mean fatality rate would predict **616 bird deaths per year (95% CI: 320-880)**. The 50-year toll from this average annual fatality rate would be 30,800 bird deaths (95% CI: 16,000-44,000), which would continue until the buildings are either renovated to reduce bird collisions or they come down. The vast majority of these deaths would be of birds newly protected under Fish and Game Code section 3513, thus causing significant unmitigated impacts.

As mentioned earlier, the accuracy of my window collision predictions depends on factors known or hypothesized to affect window collision rates. However, from the national average collision rate, I used all the variation in collision rates that was available and which resulted from a wide range in building height, type of glass, indoor and outdoor landscaping, interior light management, window to wall ratio, and structural context of the façade. This variation contributed to a robust bird-window collision rate represented by a wide 95% confidence interval. According to the confidence interval, which again was based on the wide range of conditions in the underlying data, the proposed project built as designed at 100 locations would be predicted to kill between 320 and 880 birds per year at 95 of those 100 locations, leaving the other 5 to kill birds at rates either lower or higher than this range. Even at the low end of the interval, the death toll would be excessive, amounting to 16,000 bird deaths over 50 years. This impact would be significant, especially considering that the predicted fatality rate can be prevented by implementing appropriate mitigation measures. Below I will discuss hypothesized bird-window collision factors, and I will recommend mitigation measures.

Bird-Window Collision Factors

Below is a list of collision factors I found in the scientific literature. Following this list are specific notes and findings taken from the literature and my own experience.

(1) Inherent hazard of a structure in the airspace used for nocturnal migration or other flights
(2) Window transparency, falsely revealing passage through structure or to indoor plants

(3) Window reflectance, falsely depicting vegetation, competitors, or open airspace
(4) Black hole or passage effect
(5) Window or façade extent, or proportion of façade consisting of window or other reflective surface
(6) Size of window
(7) Type of glass
(8) Lighting, which is correlated with window extent and building operations
(9) Height of structure (collision mechanisms shift with height above ground)
(10) Orientation of façade with respect to winds and solar exposure
(11) Structural layout causing confusion and entrapment
(12) Context in terms of urban-rural gradient, or surrounding extent of impervious surface vs vegetation
(13) Height, structure, and extent of vegetation grown near home or building
(14) Presence of birdfeeders or other attractants
(15) Relative abundance
(16) Season of the year
(17) Ecology, demography and behavior
(18) Predatory attacks or cues provoking fear of attack
(19) Aggressive social interactions

(1) Inherent hazard of structure in airspace.—Not all of a structure's collision risk can be attributed to windows. Overing (1938) reported 576 birds collided with the Washington Monument in 90 minutes on one night, 12 September 1937. The average annual fatality count had been 328 birds from 1932 through 1936. Gelb and Delacretaz (2009) and Klem et al. (2009) also reported finding collision victims at buildings lacking windows, although many fewer than they found at buildings fitted with widows. The takeaway is that any building going up at the project site would likely kill birds, although the impacts of a glass-sided building would likely be much greater.

(2) Window transparency.—Widely believed as one of the two principal factors contributing to avian collisions with buildings is the transparency of glass used in windows on the buildings (Klem 1989). Gelb and Delacretaz (2009) felt that many of the collisions they detected occurred where transparent windows revealed interior vegetation.

(3) Window reflectance.—Widely believed as one of the two principal factors contributing to avian collisions with buildings is the reflectance of glass used in windows on the buildings (Klem 1989). Reflectance can deceptively depict open airspace, vegetation as habitat destination, or competitive rivals as self-images (Klem 1989). Gelb and Delacretaz (2009) felt that many of the collisions they detected occurred toward the lower parts of buildings where large glass exteriors reflected outdoor vegetation. Klem et al. (2009) and Borden et al. (2010) also found that reflected outdoor vegetation associated positively with collisions.

(4) Black hole or passage effect.—Although this factor was not often mentioned in the bird-window collision literature, it was suggested in Sheppard and Phillips (2015). The black hole or passage effect is the deceptive appearance of a cavity or darkened ledge

that certain species of bird typically approach with speed when seeking roosting sites. The deception is achieved when shadows from awnings or the interior light conditions give the appearance of cavities or protected ledges. This factor appears potentially to be nuanced variations on transparency or reflectance or possibly an interaction effect of both of these factors.

(5) Window or façade extent.—Klem et al. (2009), Borden et al. (2010), Hager et al. (2013), and Ocampo-Peñuela et al. (2016) reported increased collision fatalities at buildings with larger reflective façades or higher proportions of façades composed of windows. However, Porter and Huang (2015) found a negative relationship between fatalities found and proportion of façade that was glazed.

(6) Size of window.—According to Kahle et al. (2016), collision rates were higher on large-pane windows compared to small-pane windows.

(7) Type of glass.—Klem et al. (2009) found that collision fatalities associated with the type of glass used on buildings. Otherwise, little attention has been directed towards the types of glass in buildings.

(8) Lighting.—Parkins et al. (2015) found that light emission from buildings correlated positively with percent glass on the façade, suggesting that lighting is linked to the extent of windows. Zink and Eckles (2010) reported fatality reductions, including an 80% reduction at a Chicago high-rise, upon the initiation of the Lights-out Program. However, Zink and Eckles (2010) provided no information on their search effort, such as the number of searches or search interval or search area around each building.

(9) Height of structure.—I found little if any hypothesis-testing related to building height, including whether another suite of factors might relate to collision victims of high-rises. Are migrants more commonly the victims of high-rises or of smaller buildings?

(10) Orientation of façade.—Some studies tested façade orientation, but not convincingly. Confounding factors such as the extent and types of windows would require large sample sizes of collision victims to parse out the variation so that some portion of it could be attributed to orientation of façade. Whether certain orientations cause disproportionately stronger or more realistic-appearing reflections ought to be testable through measurement, but counting dead birds under façades of different orientations would help.

(11) Structural layout.—Bird-safe building guidelines have illustrated examples of structural layouts associated with high rates of bird-window collisions, but little attention has been directed towards hazardous structural layouts in the scientific literature. An exception was Johnson and Hudson (1976), who found high collision rates at 3 stories of glassed-in walkways atop an open breezeway, located on a break in slope with trees on one side of the structure and open sky on the other, Washington State University.

(12) Context in urban-rural gradient.—Numbers of fatalities found in monitoring have associated negatively with increasing developed area surrounding the building (Hager et al. 2013), and positively with more rural settings (Kummer et al. 2016a).

(13) Height, structure and extent of vegetation near building.—Correlations have sometimes been found between collision rates and the presence or extent of vegetation near windows (Hager et al. 2008, Borden et al. 2010, Kummer et al. 2016a, Ocampo-Peñuela et al. 2016). However, Porter and Huang (2015) found a negative relationship between fatalities found and vegetation cover near the building. In my experience, what probably matters most is the distance from the building that vegetation occurs. If the vegetation that is used by birds is very close to a glass façade, then birds coming from that glass will be less likely to attain sufficient speed upon arrival at the façade to result in a fatal injury. Too far away and there is probably no relationship. But 30 to 50 m away, birds alighting from vegetation can attain lethal speeds by the time they arrive at the windows.

(14) Presence of birdfeeders.—Dunn (1993) reported a weak correlation ($r = 0.13$, $P < 0.001$) between number of birds killed by home windows and the number of birds counted at feeders. However, Kummer and Bayne (2015) found that experimental installment of birdfeeders at homes increased bird collisions with windows 1.84-fold.

(15) Relative abundance.—Collision rates have often been assumed to increase with local density or relative abundance (Klem 1989), and positive correlations have been measured (Dunn 1993, Hager et al. 2008). However, Hager and Craig (2014) found a negative correlation between fatality rates and relative abundance near buildings.

(16) Season of the year.—Borden et al. (2010) found 90% of collision fatalities during spring and fall migration periods. The significance of this finding is magnified by 7-day carcass persistence rates of 0.45 and 0.35 in spring and fall, rates which were considerably lower than during winter and summer (Hager et al. 2012). In other words, the concentration of fatalities during migration seasons would increase after applying seasonally-explicit adjustments for carcass persistence. Fatalities caused by collisions into the glass façades of the project's building would likely be concentrated in fall and spring migration periods.

(17) Ecology, demography and behavior.—Klem (1989) noted that certain types of birds were not found as common window-caused fatalities, including soaring hawks and waterbirds. Cusa et al. (2015) found that species colliding with buildings surrounded by higher levels of urban greenery were foliage gleaners, and species colliding with buildings surrounded by higher levels of urbanization were ground foragers. Sabo et al. (2016) found no difference in age class, but did find that migrants are more susceptible to collision than resident birds.

(18) Predatory attacks.—Panic flights caused by raptors were mentioned in 16% of window strike reports in Dunn's (1993) study. I have witnessed Cooper's hawks chasing birds into windows, including house finches next door to my home and a northern mocking bird chased directly into my office window. Predatory birds likely to collide

with the project's windows would include Peregrine falcon, red-shouldered hawk, Cooper's hawk, and sharp-shinned hawk.

(19) Aggressive social interactions.—I found no hypothesis-testing of the roles of aggressive social interactions in the literature other than the occasional anecdotal account of birds attacking their self-images reflected from windows. However, I have witnessed birds chasing each other and sometimes these chases resulting in one of the birds hitting a window.

Although City of Irvine (2010) correctly identified reflectance as a window attribute to avoid, most of the known or suspected collision risk factors would either be added abundantly by the project, or their effects remain unknown (Table 3).

Window Collision Solutions

Given the magnitude of bird-window collision impacts, there are obviously great opportunities for reducing and minimizing these impacts going forward. Existing structures can be modified or retrofitted to reduce impacts, and proposed new structures can be more carefully sited, designed, and managed to minimize impacts. However, the costs of some of these measures can be high and can vary greatly, but most importantly the efficacies of many of these measures remain uncertain. Both the costs and effectiveness of all of these measures can be better understood through experimentation and careful scientific investigation. **Post-construction fatality monitoring should be an essential feature of any new building project**.

Any new project should be informed by preconstruction surveys of daytime and nocturnal flight activity. Such surveys can reveal the one or more façades facing the prevailing approach direction of birds, and these revelations can help prioritize where certain types of mitigation can be targeted. It is critical to formulate effective measures prior to construction, because post-construction options will be limited, likely more expensive, and probably less effective.

(1) Retrofitting to reduce impacts

(1A) Marking windows
(1B) Managing outdoor landscape vegetation
(1C) Managing indoor landscape vegetation
(1D) Managing nocturnal lighting

(1A) 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%. 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).

Following up on the results of Johnson and Hudson (1976), I decided to mark windows of my home, where I have documented 5 bird collision fatalities between the time I moved in and 6 years later. I marked my windows with decals delivered to me via US Postal Service from a commercial vendor. I have documented no fatalities at my windows during the 8 years hence. In my assessment, markers can be effective in some situations.

(2) Siting and Designing to minimize impacts

(2A) Deciding on location of structure
(2B) Deciding on façade and orientation
(2C) Selecting type and sizes of windows
(2D) Designing to minimize transparency through two parallel façades
(2E) Designing to minimize views of interior plants
(2F) Landscaping to increase distances between windows and trees and shrubs

(3) Monitoring for adaptive management to reduce impacts

(3A) Systematic monitoring for fatalities to identify seasonal and spatial patterns
(3B) Adjust light management, window marking and other measures as needed.

Guidelines on Building Design

If the project goes forward, it should at a minimum adhere to available guidelines on building design intended to minimize collision hazards to birds. 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. The San Francisco Planning Department's (2011) building design guidelines are more comprehensive than those of New York City, but they could have gone further. For example, the San Francisco guidelines probably should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced. 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 effectiveness, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess effectiveness and to quantify post-construction fatalities is to monitor the project for fatalities.

HABITAT LOSS

The Addendum reiterates the reporting in the 2013 EIR that the site supported 117 mature trees in 2013, including a Grand Oak that is likely the oldest tree in Lafayette (Impact Sciences 2020:). Although the City's Tree Protection Ordinance were established to protect these trees, 48 of the 117 trees on site were removed in 2016 (Impact Sciences 2020). The resumed project would remove another 55 trees, leaving only 16 (13%) of the original 117. This level of removal would exceed the project impact of the 2013 EIR by 10 trees. The revised mitigation for this proposed additional impact is the planting of more trees.

Two impacts remain unaddressed in both the 2013 EIR and the Addendum. The first impact is loss of environmental context of the planted trees compared to the original trees. The original trees live amid grasslands and an ephemeral stream, and in this context many species of wildlife benefit from the juxtapositions of mature trees and lower-stature vegetation. The trees provide nesting substrate for many birds, while the grasslands provide forage. From the oaks, California scrub-jays cache acorns in grass-covered soil in such a manner that those acorns that are later forgotten by the scrub-jays can germinate and grow into new oaks. And, of course, those acorns that are not forgotten are food for the scrub-jays. The older trees, and not the younger ones that would be planted, are used by the local acorn woodpeckers. Additional cavity-nesting birds, such as American kestrels, will nest in the older trees with their cavities, but not in the younger trees which have earned no cavities. The older trees will serve as daily roosts of large owls, which by night hunt for small mammals in the grasslands. A planted tree in an apartment complex lacks the context of a mature tree in a grassland that provides suitable habitat value for many species of wildlife.

The second unaddressed impact is the lost capacity of breeding birds. Neither the 2013 EIR nor the Addendum provide an estimate of how many breeding territories are likely to be lost to the project. Habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity. Given that the project site supports mature trees, grasslands and an ephemeral stream, the capacity of the project site for producing birds is enormous. For example, a grassland/wetland/woodland complex at one study site had a total bird nesting density of 32.8 nests per acre (Young 1948). In another study on a similar complex of vegetation cover, the average annual nest density was 35.8 nests per acre (Yahner 1982). Averaged (34.3 nests per acre), these densities multiplied against the project's habitat loss would predict losses of 764 bird nests per year. Even if the site's habitat value is half that at the sites studied by Young (1948) and Yahner (1982), the project would cost birds 382 nests per year. These losses would continue for as long as the project exists.

The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site was typical of bird productivity, the project site would cease generating 1,108 to 2,216 new birds per year. The lost capacity of both breeders and annual chick production after 100 years would total 221,560 (nests/year × chicks/nest × number of years + 2 adults/nest) assuming half the habitat capacity of Young (1948) and Yahner (1982) to 443,120 assuming the same habitat capacity as sites studied by

Young (1948) and Yahner (1982). These estimated losses are substantial, and qualify as significant impacts that have yet to be addressed in the EIR or its Addendum. A fair argument can be made for the need to prepare a supplemental EIR.

CUMULATIVE IMPACTS

The cumulative effects analysis of the Addendum (Impact Sciences 2020:22) consists of a list of what are characterized as infill projects. That the projects are infill does not necessarily diminish their potential contributions of adverse cumulative impacts on biological resources. If the sites of these infill projects provide habitat value for rare, threatened or endangered species, then their status as infill would be irrelevant. Unfortunately, the list of projects in the Addendum provides no information about the environmental conditions at those sites, nor does it even include spatial areas affected.

MITIGATION

The mitigation measures proposed in the EIR and updated in the Addendum were formulated from inadequate information about the occurrences of special-status species at the project site. Minimization measures are needed, but given the nature of the project, compensatory mitigation is also needed. A substantial area with natural vegetation cover needs to be protected within a reasonable distance from the project site.

Mitigation needs to be formulated for bird-window collisions, such as following the guidelines I summarized earlier. Compensatory mitigation for those collisions that cannot be prevented can be provided in the form of donations to wildlife rehabilitation facilities; after all, it will be wildlife rehabilitation facilities that receive those collision victims that have not yet perished.

Preconstruction surveys for wildlife need to be informed by detection surveys. Preconstruction surveys are really salvage efforts, but it needs to be understood that preconstruction surveys detect only a small fraction of special-status species occurring on a project site. Preconstruction surveys perform better when they are informed by detection surveys, which have been carefully designed by species' experts and natural resource agency biologists.

A case in point was the preconstruction surveys performed for nesting birds and roosting bats prior to the removal of 48 trees on the project site (Impact Sciences 2020:14). The nesting survey took place on a single day – 16 March 2016, and the roosting bat survey on site took place on another single day – 21 March 2016. Although mid-March is a bit early for many bird species, the extremely limited effort predisposed a negative finding. Except for large raptors, bird nests are difficult to find because birds strive for concealment and are very good at it. Birds often divert the observer's attention with feigned injury, or they make themselves visible at locations elsewhere than the nest site. Finding a nest, say of an Anna's hummingbird or a loggerhead shrike, requires survey vigilance that out-endures the birds' willingness to resist a visit to the nest. The

claim that no nests were found among 48 trees during a single day lacks credibility, and is therefore of no informative value.

The bat survey involved a visual scan using binoculars and a single night of survey at a single location using an acoustic detector. The visual scans were unlikely to locate bats on site, as roosting bats in trees are very difficult to locate (Kunz and Lumsden 2003). They wrap themselves in leaves or hide within cracks in the bark. It is the rare bat roosting in a tree that will be detected by a visual scan. As for the acoustic detector, it was placed low to the ground, which would be suitable for bats that forage low, such as Myotine bats, but unsuitable for tree bats. Acoustic detectors have about a 30-m detection radius, which severely restricts coverage of a project site the size of 22 acres. Using a thermal imaging camera, I have seen many bats that were missed by acoustic detectors, some of which were deployed while I performed my thermal-imaging surveys. That no bats were detected during one night of an acoustic detector placed near the ground means nothing about use of the site by bats.

Preconstruction surveys for wildlife are largely ineffective without having been informed by detection surveys. Detection surveys are designed to detect biological resources for which the surveys were designed. A supplemental EIR needs to be prepared, and it needs to require detection surveys, including detection surveys for bird nests and bats, and which then properly inform preconstruction surveys.

Thank you for your attention,

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Shawn Smallwood, Ph.D.

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Curriculum Vitae

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Born May 3, 1963 in
Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;

- Using systems analysis and experimental design principles to identify meaningful ecological patterns that can inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 443 professional publications, including:
- 80 peer reviewed publications
- 24 in non-reviewed proceedings
- 337 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 84 public presentations of research results at meetings
- Reviewed many professional papers and reports
- Testified in 4 court cases.

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated the causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC

reviewed the science underlying the Alameda County Avian Protection Program, and advised the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Taught Contemporary Environmental Issues, Natural Resources Conservation (twice), Mammalogy, Behavioral Ecology, and Ornithology Lab.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Systems Ecologist, 1996 to present, Consulting in the Public Interest, www.cipi.com. Member of a multi-disciplinary consortium of scientists facilitating large-scale, environmental planning projects and litigation. We provide risk assessments, assessments of management practices, and expert witness testimony.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Headed NESN's efforts to inform academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws pertaining to special-status species. Also testified at public hearings on behalf of environmental groups and endangered species.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to

determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning. Developed quantitative assessment of land units for their conservation and restoration opportunities, using the ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under the mentorship of Dr. Shu Geng, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Also managed and analyzed a data base of energy use in California agriculture, and assisted with a landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing a statewide mountain lion track count for long-term monitoring of numbers and distribution.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a

$718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the

decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Representative Clients/Funders

Law Offices of Stephan C. Volker
Eric K. Gillespie Professional Corporation
Law Offices of Berger & Montague
Lozeau | Drury LLP
Law Offices of Roy Haber
Law Offices of Edward MacDonald
Law Office of John Gabrielli
Law Office of Bill Kopper
Law Office of Donald B. Mooney
Law Office of Veneruso & Moncharsh
Law Office of Steven Thompson
Law Office of Brian Gaffney
California Wildlife Federation
Defenders of Wildlife
Sierra Club
National Endangered Species Network
Spirit of the Sage Council
The Humane Society
Hagens Berman LLP
Environmental Protection Information Center
Goldberg, Kamin & Garvin, Attorneys at Law
Californians for Renewable Energy (CARE)
Seatuck Environmental Association
Friends of the Columbia Gorge, Inc.
Save Our Scenic Area
Alliance to Protect Nantucket Sound
Friends of the Swainson's Hawk
Alameda Creek Alliance
Center for Biological Diversity
California Native Plant Society
Endangered Wildlife Trust
and BirdLife South Africa
AquAlliance
Oregon Natural Desert Association
Save Our Sound
G3 Energy and Pattern Energy
Emerald Farms
Pacific Gas & Electric Co.
Southern California Edison Co.
Georgia-Pacific Timber Co.
Northern Territories Inc.
David Magney Environmental Consulting
Wildlife History Foundation
NextEra Energy Resources, LLC
FloDesign Wind Turbine
EDF Renewables
National Renewable Energy Lab
Altamont Winds LLC
Comstocks Business (magazine)
BioResource Consultants
Tierra Data
Black and Veatch
Terry Preston, Wildlife Ecology Research Center
EcoStat, Inc.
US Navy
US Department of Agriculture
US Forest Service
US Fish & Wildlife Service
US Department of Justice
California Energy Commission
California Office of the Attorney General
California Department of Fish & Wildlife
California Department of Transportation
California Department of Forestry
California Department of Food & Agriculture
Ventura County Counsel
County of Yolo
Tahoe Regional Planning Agency
Sustainable Agriculture Research & Education Program
Sacramento-Yolo Mosquito and Vector Control District
East Bay Regional Park District
County of Alameda
Don & LaNelle Silverstien
Seventh Day Adventist Church
Escuela de la Raza Unida
Susan Pelican and Howard Beeman
Residents Against Inconsistent Development, Inc.
Bob Sarvey
Mike Boyd
Hillcroft Neighborhood Fund
Joint Labor Management Committee, Retail Food Industry
Lisa Rocca
Kevin Jackson
Dawn Stover and Jay Letto
Nancy Havassy
Catherine Portman (for Brenda Cedarblade)
Ventus Environmental Solutions, Inc.
Panorama Environmental, Inc.
Adams Broadwell Professional Corporation

Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	*Rana aurora draytonii*	Protocol searches; Many detections
Foothill yellow-legged frog	*Rana boylii*	Presence surveys; Many detections
Western spadefoot	*Spea hammondii*	Presence surveys; Few detections
California tiger salamander	*Ambystoma californiense*	Protocol searches; Many detections
Coast range newt	*Taricha torosa torosa*	Searches and multiple detections
Blunt-nosed leopard lizard	*Gambelia sila*	Detected in San Luis Obispo County
California horned lizard	*Phrynosoma coronatum frontale*	Searches; Many detections
Western pond turtle	*Clemmys marmorata*	Searches; Many detections
San Joaquin kit fox	*Vulpes macrotis mutica*	Protocol searches; detections
Sumatran tiger	*Panthera tigris*	Research in Sumatra
Mountain lion	*Puma concolor californicus*	Research and publications
Point Arena mountain beaver	*Aplodontia rufa nigra*	Remote camera operation
Giant kangaroo rat	*Dipodomys ingens*	Detected in Cholame Valley
San Joaquin kangaroo rat	*Dipodomys nitratoides*	Research, conservation at NAS Lemoore
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	Non-target captures and mapping of dens
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Habitat assessment, monitoring
Salinas harvest mouse	*Reithrodontomys megalotus distichlus*	Captures; habitat assessment
California clapper rail	*Rallus longirostris*	Surveys and detections
Golden eagle	*Aquila chrysaetos*	Research in Altamont Pass
Swainson's hawk	*Buteo swainsoni*	Research in Sacramento Valley
Northern harrier	*Circus cyaeneus*	Research and publication
White-tailed kite	*Elanus leucurus*	Research and publication
Loggerhead shrike	*Lanius ludovicianus*	Research in Sacramento Valley
Least Bell's vireo	*Vireo bellii pusillus*	Detected in Monterey County
Willow flycatcher	*Empidonax traillii extimus*	Research at Sierra Nevada breeding sites
Burrowing owl	*Athene cunicularia hypugia*	Research at multiple locations
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Research and publication
Analytical		
Arroyo southwestern toad	*Bufo microscaphus californicus*	Research and report.
Giant garter snake	*Thamnophis gigas*	Research and publication
Northern goshawk	*Accipiter gentilis*	Research and publication
Northern spotted owl	*Strix occidentalis*	Research and reports
Alameda whipsnake	*Masticophis lateralis euryxanthus*	Expert testimony

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Comments on Environmental Documents

I was retained or commissioned to comment on environmental planning and review documents, including:

- Comments on proposed rule for incidental eagle take (2016, 49 pp);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18 pp);
- Supplementary Reply Witness Statement Amherst Island Wind Farm, Ontario (2015, 38 pp);
- Witness Statement on Amherst Island Wind Farm, Ontario (2015, 31 pp);
- Second Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 6 pp);
- Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 10 pp);
- Witness Statement on White Pines Wind Farm, Ontario (2015, 9 pp);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9 pp);

- Replies to comments 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6 pp);
- Sierra Lakes Commerce Center Project DEIR (2015, 9 pp);
- West Valley Logistics Center Specific Plan DEIR(2015, 10 pp);
- World Logistic Center Specific Plan FEIR (2015, 12 pp);
- Bay Delta Conservation Plan EIR/EIS (2014, 21 pp);
- Addison Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Addison Wind Energy Project DEIR (2014, 15 pp);
- Addison and Rising Tree Wind Energy Project FEIR (2014, 12 pp);
- Alta East Wind Energy Project FEIS (2013, 23 pp);
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16 pp);
- Clearwater and Yakima Solar Projects DEIR (2013, 9 pp);
- Cuyama Solar Project DEIR (2014, 19 pp);
- Draft Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49 pp);
- Kingbird Solar Photovoltaic Project EIR (2013, 19 pp);
- Lucerne Valley Solar Project Initial Study & Mitigated Negative Declaration (2013, 12 pp);
- Palen Solar Electric Generating System Final Staff Assessment of California Energy Commission, (2014, 20 pp);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9 pp);
- Rising Tree Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Rising Tree Wind Energy Project DEIR (2014, 15 pp);
- Soitec Solar Development Project Draft PEIR (2014, 18 pp);
- Comment on the Biological Opinion (08ESMF-00-2012-F-0387) of Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3 pp);
- West Antelope Solar Energy Project Initial Study and Negative Declaration (2013, 18 pp);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28 pp);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10 pp);
- Declaration on Tule Wind project FEIR/FEIS (2013; 24 pp);
- Sunlight Partners LANDPRO Solar Project Mitigated Negative Declaration (2013; 11 pp);
- Declaration in opposition to BLM fracking (2013; 5 pp);
- Rosamond Solar Project Addendum EIR (2013; 13 pp);
- Pioneer Green Solar Project EIR (2013; 13 pp);
- Reply to Staff Responses to Comments on Soccer Center Solar Project Mitigated Negative Declaration (2013; 6 pp);
- Soccer Center Solar Project Mitigated Negative Declaration (2013; 10 pp);
- Plainview Solar Works Mitigated Negative Declaration (2013; 10 pp);
- Reply to the County Staff's Responses on comments to Imperial Valley Solar Company 2 Project (2013; 10 pp);
- Imperial Valley Solar Company 2 Project (2013; 13 pp);
- FRV Orion Solar Project DEIR (PP12232) (2013; 9 pp);
- Casa Diablo IV Geothermal Development Project (3013; 6 pp);
- Reply to Staff Responses to Comments on Casa Diablo IV Geothermal Development Project (2013; 8 pp);
- FEIS prepared for Alta East Wind Project (2013; 23 pp);

- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Map and Rezoning Project DEIR (2013; 9 pp);
- Analysis of Biological Assessment of Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10 pp);
- Declaration on Campo Verde Solar project FEIR (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8 pp);
- Declaration on North Steens Transmission Line FEIS (2012; 62 pp);
- City of Lancaster Revised Initial Study for Conditional Use Permits 12-08 and 12-09, Summer Solar and Springtime Solar Projects (2012; 8 pp);
- J&J Ranch, 24 Adobe Lane Environmental Review (2012; 14 pp);
- Reply to the County Staff's Responses on comments to Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 8 pp);
- Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 9 pp);
- Desert Harvest Solar Project EIS (2012; 15 pp);
- Solar Gen 2 Array Project DEIR (2012; 16 pp);
- Ocotillo Sol Project EIS (2012; 4 pp);
- Beacon Photovoltaic Project DEIR (2012; 5 pp);
- Declaration on Initial Study and Proposed Negative Declaration for the Butte Water District 2012 Water Transfer Program (2012; 11 pp);
- Mount Signal and Calexico Solar Farm Projects DEIR (2011; 16 pp);
- City of Elk Grove Sphere of Influence EIR (2011; 28 pp);
- Comment on Sutter Landing Park Solar Photovoltaic Project MND (2011; 9 pp);
- Statement of Shawn Smallwood, Ph.D. Regarding Proposed Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4 pp);
- Declaration of K. Shawn Smallwood on Biological Impacts of the Ivanpah Solar Electric Generating System (ISEGS) (2011; 9 pp);
- Comments on Draft Eagle Conservation Plan Guidance (2011; 13 pp);
- Comments on Draft EIR/EA for Niles Canyon Safety Improvement Project (2011; 16 pp);
- Declaration of K. Shawn Smallwood, Ph.D., on Biological Impacts of the Route 84 Safety Improvement Project (2011; 7 pp);
- Rebuttal Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of Intervenors Friends of The Columbia Gorge & Save Our Scenic Area (2010; 6 pp);
- Prefiled Direct Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of Intervenors Friends of the Columbia Gorge & Save Our Scenic Area. Comments on Whistling Ridge Wind Energy Power Project DEIS, Skamania County, Washington (2010; 41 pp);
- Evaluation of Klickitat County's Decisions on the Windy Flats West Wind Energy Project (2010; 17 pp);
- St. John's Church Project Draft Environmental Impact Report (2010; 14 pp.);
- Initial Study/Mitigated Negative Declaration for Results Radio Zone File #2009-001 (2010; 20 pp);
- Rio del Oro Specific Plan Project Final Environmental Impact Report (2010;12 pp);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009: 9 pp);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania

County, Washington. Second Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Dec 2008; 17 pp);

- Comments on Draft 1A Summary Report to CAISO (2008; 10 pp);
- County of Placer's Categorical Exemption of Hilton Manor Project (2009; 9 pp);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3 pp);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142 pp);
- Delta Shores Project EIR, south Sacramento (2009; 11 pp + addendum 2 pp);
- Declaration of Shawn Smallwood in Support of Care's Petition to Modify D.07-09-040 (2008; 3 pp);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9 pp);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11 pp);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7 pp.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Sep 2008; 16 pp);
- California Energy Commission's Preliminary Staff Assessment of the Colusa Generating Station (2007; 24 pp);
- Rio del Oro Specific Plan Project Recirculated Draft Environmental Impact Report (2008: 66 pp);
- Replies to Response to Comments Re: Regional University Specific Plan Environmental Impact Report (2008; 20 pp);
- Regional University Specific Plan Environmental Impact Report (2008: 33 pp.);
- Clark Precast, LLC's "Sugarland" project, Negative Declaration (2008: 15 pp.);
- Cape Wind Project Draft Environmental Impact Statement (2008; 157 pp.);
- Yuba Highlands Specific Plan (or Area Plan) Environmental Impact Report (2006; 37 pp.);
- Replies to responses to comments on Mitigated Negative Declaration of the proposed Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 5 pp);
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- Windy Point Wind Farm Environmental Review and EIS (2006; 14 pp and 36 Powerpoint slides in reply to responses to comments);
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- Buena Vista Wind Energy Project Notice of Preparation of EIR (2004; 15 pp);
- Negative Declaration of the proposed Callahan Estates Subdivision (2004; 11 pp);
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- Negative Declaration of the proposed Creekside Highlands Project, Tract 7270 (2004; 21

pp);

- On the petition California Fish and Game Commission to list the Burrowing Owl as threatened or endangered (2003; 10 pp);
- Conditional Use Permit renewals from Alameda County for wind turbine operations in the Altamont Pass Wind Resource Area (2003; 41 pp);
- UC Davis Long Range Development Plan of 2003, particularly with regard to the Neighborhood Master Plan (2003; 23 pp);
- Anderson Marketplace Draft Environmental Impact Report (2003: 18 pp + 3 plates of photos);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003: 6 pp);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002: 23 pp);
- Response to testimony of experts at the East Altamont Energy Center evidentiary hearing on biological resources (2002: 9 pp);
- Revised Draft Environmental Impact Report, The Promenade (2002: 7 pp);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002: 3 pp);
- UC Merced -- Declaration of Dr. Shawn Smallwood in support of petitioner's application for temporary restraining order and preliminary injunction (2002: 5 pp);
- Replies to response to comments in Final Environmental Impact Report, Atwood Ranch Unit III Subdivision (2003: 22 pp);
- Draft Environmental Impact Report, Atwood Ranch Unit III Subdivision (2002: 19 pp + 8 photos on 4 plates);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002: 17 pp + 3 photos; follow-up report of 3 pp);
- Initial Study and Negative Declaration, Silver Bend Apartments, Placer County (2002: 13 pp);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001: 26 pp);
- Initial Study, Colusa County Power Plant (2001: 6 pp);
- Comments on Proposed Dog Park at Catlin Park, Folsom, California (2001: 5 pp + 4 photos);
- Pacific Lumber Co. (Headwaters) Habitat Conservation Plan and Environmental Impact Report (1998: 28 pp);
- Final Environmental Impact Report/Statement for Issuance of Take authorization for listed species within the MSCP planning area in San Diego County, California (Fed. Reg. 62 (60): 14938, San Diego Multi-Species Conservation Program) (1997: 10 pp);
- Permit (PRT-823773) Amendment for the Natomas Basin Habitat Conservation Plan, Sacramento, CA (Fed. Reg. 63 (101): 29020-29021) (1998);
- Draft Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). (Fed. Reg. 64(176): 49497-49498) (1999: 8 pp);
- Review of the Draft Recovery Plan for the Arroyo Southwestern Toad (*Bufo microscaphus californicus*) (1998);
- Ballona West Bluffs Project Environmental Impact Report (1999: oral presentation);
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Negative Declaration for the Sunset Skyranch Airport Use Permit (1999);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring

Program (BRMIMP) for the Metcalf Energy Center (2000: 10 pp);
- California Energy Commission's Final Staff Assessment of the proposed Metcalf Energy Center (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000: 4 pp);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11 pp);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7 pp);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9 pp).

Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12 pp);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8 pp);
- Draft Program Level EIR for Covell Village (2005; 19 pp);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping document (2003: 7 pp.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7 pp);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8 pp.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35 pp.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2 pp.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7 pp.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10 pp.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7 pp.);
- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10 pp);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 pp + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No. 103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife

Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa Barbara, 27 October 2006.

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association, Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

"No Surprises" -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993.

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion;

Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.

- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.

- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.

- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.

- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

Smallwood, K.S., D. Mooney, and M. McGuinness. 2003. We must stop the UCD biolab now. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2002. Spring Lake threatens Davis. Op-Ed to the Davis Enterprise.

Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	**Journal**
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Biological Control	The Condor

Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of $553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines and Amherst Island Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

EXHIBIT B

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July 2, 2019

Via Email and U.S. Mail

Robert Hodil, Esq.
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Re: CEQA Review of Terraces of Lafayette Apartment Project

Dear Mr. Hodil:

As you know, my law firm represents O'Brien Land Company, LLC ("O'Brien"), the Project applicant and developer of the above-referenced Terraces of Lafayette multi-family housing project (the "Project"). I write because recent correspondence and communications from the City of Lafayette's ("City") Department of Planning and Building staff, and its newly engaged environmental consultant, Impact Sciences, Inc., raise serious concerns that the City may be embarking on, or may already be on, an illegal course of conduct – in violation of CEQA and due process – with respect to its resumed environmental review and processing of the Project. Generally, we are concerned by what appear to be the City's increased antipathy toward the Project and related efforts to impose unnecessary expense, process, and delay in its processing, including potentially erecting illegal obstacles to the Project's proper and timely environmental review, and to its processing and approval under the provisions of the Housing Accountability Act ("HAA"; *see* Gov. Code, § 65589.5(d).) While we would certainly welcome the City's assurance that our concerns are misplaced, we seek, for the record and in any event, to advise the City of the relevant law and to avert if possible the unlawful outcome toward which its recent conduct has dangerously veered.

Specifically, for reasons explained in greater detail below, the City would be acting unlawfully, and in a manner *expressly prohibited* by CEQA, should it decide that it is authorized to require a subsequent or supplemental Environmental Impact Report ("EIR") for the Project, rather than adopting a properly peer-reviewed version of the Addendum prepared by O'Brien's expert environmental consultant, First Carbon Solutions ("FCS"). O'Brien reserves all its legal rights and remedies against the City should it unlawfully attempt to require a subsequent or supplemental EIR.

I. Relevant Factual and Procedural Background

The Terraces of Lafayette Apartment Project is a 315-unit affordable multi-family housing development project, proposed to be located on a 22-plus acre parcel at the southwest corner of Pleasant Hill Road and Deer Hill Road, the application for which was "deemed complete" pursuant to the Permit Streamlining Act ("PSA"; Gov. Code, § 65920 et seq.) in 2011. The Project is a "housing development project" under the HAA, meaning that, unlike other projects with which the City has dealt in the past, the City "shall not disapprove" it "or condition [its] approval in a manner that renders [it] infeasible" without making specific findings, which I note that the City will be unable to make on the record before it or any record it could lawfully create. (See, Gov. Code, § 65589.5(d)(1)-(5).)

As relevant to the specific CEQA-related concerns prompting this letter, the Project was fully analyzed in a May 8, 2012 Final EIR entitled "The Terraces of Lafayette Environmental Impact Report" (the "2013 EIR"), which was certified by the City's Planning Commission on March 4, 2013 (PC Res. No. 2013-01) and, following O'Brien's appeal challenging the factual bases of that EIR's significant impact conclusions, certified by the City Council on August 12, 2013 (City Council Res. No. 2013-18). While it certified the EIR in 2013, for various reasons the City did not act on the Project at that time.

Thereafter, beginning on September 9, 2013, the City, O'Brien, and the landowner entered into a series of Tolling Agreements and extensions—all unanimously approved by the City Council; and beginning in January 2014, they entered into the Terraces Project Alternative Process Agreement followed by a series of extensions and amendments—also all unanimously approved by the City Council. The upshot of the Tolling and Process Agreements was to suspend all statutes of limitations and legal timelines affecting, and to toll and preserve, without prejudice, all parties' legal rights, defenses, positions and claims regarding the 2013 EIR and the Project – including the City's egregious actions and arbitrary consultant work product manipulations evidencing animus toward it in that CEQA review process – while the City and O'Brien pursued potential approval of an alternative project for the Project site, as proposed by the City (and which the City perceived to be potentially more favored by the community) consisting of 44-45 single-family detached homes and community amenities (the "Homes at Deer Hill").

The City later approved the alternative Homes at Deer Hill project (pursuant to a separate 2015 Supplemental EIR), but through a citizen referendum the rezoning approval needed for that project was ultimately defeated by the voters, following a legal challenge in which the substantive validity of the referendum was upheld by the First District Court of Appeal's published opinion reversing a trial court judgment that had invalidated it after a "change in [the] law." (*City of Morgan Hill v. Bushey* (2018) 5 Cal.5th 1068, 1090.) The upshot of these legal and political developments was that a vocal group of no-growth, anti-Project citizens thwarted the compromise offered by the City's approval of the Homes at Deer Hill project, and therefore

processing of the original Terraces of Lafayette Apartment Project was resumed pursuant to the parties' contractual Tolling and Process Agreements in 2018 exactly where it had left off in 2013. The resumed processing of that original Project is the context in which the City's recent concerning actions that are the subject of this letter are occurring.

II. The Certified 2013 Final EIR For The Terraces At Lafayette Project And CEQA's Rules Prohibiting A Subsequent Or Supplemental EIR Absent Evidence-Supported Findings Of Conditions That Do Not Exist Here

The certified 2013 FEIR fully analyzed all potentially significant environmental impacts of the Project now before the City. It found, disclosed, and analyzed 13 significant and unavoidable ("SU") impacts in five different impact areas: three in the area of aesthetics/visual resources, two in the area of air quality, two in the area of biological resources, three in the area of land use and planning, and three in the area of transportation and traffic.

The City initially pushed a supplemental EIR when O'Brien met with City staff on June 15, 2018, at which time O'Brien was asked several times how it would "thread the needle" to successfully move the project forward after staff said a supplemental EIR was required because the 2013 EIR and its studies were "stale." The O'Brien team responded that CEQA documents do not simply become stale because of the passage of time and that any additional review would be subject to the requirements in CEQA Guidelines section 15162. The City continued pushing a supplemental EIR in its June 28, 2018 letter to O'Brien indicating the City's desire to update supposedly "out of date" CEQA studies for a new "environmental document" and demanding a response within 24 hours. As requested by the City, O'Brien responded the next day reminding the City that CEQA presumes the validity of certified environmental documents and does not place a time limit on their validity or on related supporting documentation.

As explained in detail to the City in my partner Bryan Wenter's October 25, 2018 letter to then-Planning Director Niroop Srivatsa, which letter addressed unsupported and legally incorrect assertions to the contrary in a July 2, 2018 memorandum from Jean Eisberg (a contract planner hired by the City), ***CEQA prohibits the City from requiring a subsequent or supplemental EIR unless specified conditions are met and supported by substantial evidence***. To be very clear, absent such conditions, a subsequent or supplemental EIR is **absolutely *prohibited*** by CEQA.

In reviewing Ms. Eisberg's July 2, 2018 remarkable memo blithely asserting that a supplemental EIR would be required for the Project, and the related correspondence on this CEQA "subsequent review" issue, I am immediately struck by three rather astonishing things: (1) that the City would even attempt to delegate the analysis and decision on such an important *legal* issue to a *contract planner*; (2) that the contract planner would get the governing legal standards under CEQA so horribly wrong; and (3) that no one from the City ever provided the courtesy of a written

response to Mr. Wenter's October 25, 2018 letter setting forth the correct governing legal standards (which, I suppose, is tantamount to a concession on its part that it could not dispute Mr. Wenter's accurate statement of the law).

In any event, the issue of the appropriate level of CEQA review in this matter, if any, is – particularly in the historic context of the City's ongoing discriminatory treatment of this affordable housing Project – an important one that clearly must ultimately be made by the City's highest decision-making body, in the likely event the Planning Commission's decision on the project's use permit is appealed, based on the legal advice of competent CEQA/land use counsel, not the clearly erroneous and unsupported non-legal analysis and conclusion of a contract planner that is reflected in the glib Eisberg memo. To put a finer point on it, the City's initial and fumbled attempt at handling this issue strongly suggests – consistent with its past unfortunate efforts to derail this Project as reflected by the voluminous record – an improper and unjustified attempt to discriminate against the Project and subject it to excessive and legally-prohibited CEQA review burdens based on the flimsiest of pretexts and what could only be a discriminatory animus.[1]

Following Mr. Wenter's letter, his conversations with you (as the City's outside land use counsel, retained in part to attempt to "maximize" the City's options in handling the Project) had indicated substantial agreement that an addendum here would likely be appropriate given the governing CEQA standards, and O'Brien was thus reasonably and justifiably confident that this issue had been resolved and put to rest – as it certainly should have been based on the law.[2] More recent communications of the City and its newly engaged environmental consultant, Impact Sciences, however, indicate that this may not be the case.

Thus, a January 14, 2019 letter proposal from Jessica Flores of Impact Sciences, Inc. to the City, authorized and executed by the City purports to verify the City's request not only to conduct the peer review of FCS's detailed and complete Addendum, as discussed with O'Brien many times, but also "[t]o determine the appropriate level of environmental document for the Terraces at Lafayette Project at this point in time (Addendum or Supplemental/Subsequent EIR)." Five months after

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[1] See, e.g., *Department of Commerce v. New York* (2019) 588 U.S. __ (discussing "a recognized narrow exception to the general rule against inquiring into the mental processes of administrative decisionmakers" based on a "strong showing of bad faith or improper behavior."); see also Gov. Code §§ 65589.5(k)(1)(A) and 65589.5(l) ("The court may issue an order or judgment directing the local agency to approve the housing development project or emergency shelter if the court finds that the local agency acted in bad faith [i.e., including, but is not limited to, an action that is frivolous or otherwise entirely without merit] when it disapproved or conditionally approved the housing development . . . in violation of this section.")

[2] O'Brien funded and presented to the City an Addendum prepared by First Carbon Solutions ("FCS") for its review and input.

the City learned that FCS had prepared an addendum, on behalf of O'Brien, to ensure CEQA compliance, and three months after the City received FCS's expert and complete addendum, the City told the O'Brien team on March 15, 2019 that the City desired to "take over" the addendum.

An April 5, 2019 memorandum to the City from Impact Sciences regarding the peer review of the FCS Addendum noted, after summarizing portions of the legal standards governing whether a subsequent EIR is allowed, that "it does not appear that substantial changes in the project circumstances or substantial changes in circumstances requiring major revisions to the 2013 EIR have occurred, thereby making an addendum appropriate under CEQA." But the memo then hedged by adding the following caveat suggesting that updated technical studies might somehow change this conclusion: "However, as outlined in this memorandum, because we recommend changes to some of the methodologies used and assumptions made in the technical analysis of the Resumed Project, some additional technical studies are necessary, and the results of those studies would confirm the appropriate level of CEQA analysis."

Further, and seemingly contrary to earlier representations the City made that an Addendum was appropriate under CEQA, and that it was merely seeking a peer review of FCS's Addendum, an April 18, 2019 email from adjunct planner Michele Rodriguez to O'Brien's project manager Dave Baker and others mentioned your planned presentation (at, I might mention, a wholly unnecessary and uncommon City Council/Planning Commission public meeting ostensibly scheduled to placate the NIMBYs long opposing the project who either refuse to accept or cannot understand that there is no lawful way to deny this Project) in which you would "review the differences in Addendum vs. Supplemental EIR, and why we ***currently*** agree with the Addendum direction, ***and how that could change in future***." (Emph. added.) The City staff report for the April 29, 2019 "Terraces of Lafayette Update" public meeting, while acknowledging "Impact Sciences concluded that an Addendum would be the appropriate document for additional environmental review of the Project under CEQA," nevertheless goes on to assert that "[a]dditional technical studies are also necessary, the results of which would confirm whether an Addendum is the appropriate document under CEQA." (4/29/19 Staff Report, p. 3.)

The City's official Minutes of the April 29, 2019 meeting also reflect Ms. Rodriguez stating that Impact Sciences "determined an Addendum was the appropriate document and once in the next phase of gathering more information and completing additional studies they would re-evaluate the conclusion of an Addendum or other appropriate document under CEQA." (p. 2 of 12.) In addition, the Minutes reflect Acting Planning Director Greg Wolff "stated at this time there was no indication it would need to be anything other than an Addendum and has not met any of the tests CEQA sets forth. Therefore at this time, an Addendum is the appropriate document. However, during further review by Impact Sciences it may change the environmental document." (p. 3 of 12.) The City's website incorrectly refers to the City having "two choices."

As demonstrated by the Addendum prepared by FCS, however, the City, most emphatically, does *not* have two choices if it wants to comply with the governing law here. More specifically, the City does *not* have a choice between a subsequent or supplemental EIR and an Addendum; rather, an Addendum is compelled and is the City's *only* "option" because a Subsequent or Supplemental EIR is *prohibited* by CEQA given the undisputed record evidence here and the controlling law.

Given the minor and *environmentally-beneficial* nature of the Project modifications (as described below), and the analysis and findings of the certified 2013 EIR, it is quite impossible that any updated technical studies could yield substantial evidence establishing that any of the circumstances permitting preparation of a subsequent or supplemental EIR exist here. Nonetheless, because the City is obviously going to quite extraordinary lengths to assert that this legally-foreclosed option potentially remains open to it, a detailed review of the governing law, and how it applies here to prohibit a subsequent or supplemental EIR based on the 2013 EIR and the peer review comments of Impact Sciences, is warranted and necessary to set the record straight.

III. CEQA Absolutely Prohibits A Subsequent Or Supplemental EIR Unless A Public Agency Finds, Based On Substantial Evidence, That Substantial Project Changes, Substantial Changes In Circumstances, Or New Information Of Substantial Importance That Was Not Known Or Knowable With Due Diligence When The Previous EIR Was Certified, Will Require Major Revisions Of That EIR Due To The Involvement Of New Significant Effects Or A Substantial Increase In The Severity Of Previously Identified Significant Effects

After an EIR has been certified or a negative declaration adopted for a project, a subsequent or supplemental EIR may be required *only* when the lead agency finds, based on substantial evidence in the record, that at least one of three sets of conditions exists: (1) substantial changes are proposed in the project which would require major revisions of the EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) substantial changes in surrounding circumstances have occurred which would require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the EIR was certified becomes available and shows that the project will have one or more significant effects not discussed in the previous EIR or negative declaration, or that significant effects previously examined will be substantially more severe than shown in the EIR, or that mitigation measures previously found infeasible, or which are considerably different from those previously analyzed, would be feasible and substantially reduce significant impacts, but the project proponent declines to adopt them. (Pub. Resources Code, § 21166; 14 Cal. Code Regs., § 15162.)

No matter the City's desire to discriminate against this important affordable, HAA-protected multi-family housing Project, or to render it infeasible by subjecting it to unlawful burdens, a subsequent EIR ***cannot*** be required under the applicable legal standards set forth above. Contrary to the notion that updated technical studies could change this result, once an EIR is certified, reconsideration is neither required nor proper based on subsequent scientific reports or expert opinions that are not based on newly emergent facts and that do not disclose new or substantially more severe significant environmental impacts. (*Citizens Against Airport Pollution v. City of San Jose* (2014) 227 Cal.App.4th 788, 806-812; *Fort Mojave Indian Tribe v. Department of Health Services* (1995) 38 Cal.App.4th 1574, 1591-1598.) Stated another way, once an EIR has been certified for a project, a presumption *against* further environmental review exists under CEQA. As the First District Court of Appeal recently stated the rule, "once an EIR has been prepared for a project, CEQA ***prohibits*** the agency from requiring further EIRs ***unless*** one or more of the [triggering] events [listed in Public Resources Code § 21166] occurs[.]" (*Committee for Re-Evaluation of the T-Line Loop v. San Francisco Municipal Transportation Agency* (2016) 6 Cal.App.5th 1237, 1246, emph. added, citing Pub. Resources Code, § 21166.)

Further, while the CEQA Guidelines provide that where, as here, an addendum is prepared, a brief explanation of the decision not to prepare a subsequent or supplemental EIR, supported by substantial evidence, "should be included in [the] addendum …, the lead agency's findings on the project, or elsewhere in the record" (14 Cal. Code Regs., § 15164(e), no particular procedures are required for an agency's decision not to prepare a further EIR. (*Committee for Re-Evaluation of the T-Line Loop, supra,* 6 Cal.App.5th at 1256 [rejecting argument that agency failed to follow "required procedures" by relying on "unsupported staff conclusion" and not making "public, evidence-based, analysis and determination" in deciding no further CEQA analysis for light rail loop project was necessary; the court stated: "These are not procedural flaws, because CEQA does not set forth any particular procedure to support an agency's decision that a new EIR is not required. CEQA does not require an initial study or public hearing in these circumstances."].)

By contrast, an addendum to a previously certified EIR is properly prepared and required when there are only minor technical changes or additions that do not raise important new issues about the significant effects on the environment. (*See* 14 Cal. Code Regs., §§ 15162(a)(1), 15164(a); *Citizens Against Airport Pollution, supra,* 227 Cal.App.4th at 796-797 [addendum proper where some changes or additions to previously-certified EIR are necessary, but none of the conditions described in Pub. Resources Code § 21166 or CEQA Guidelines § 15162 calling for preparation of a subsequent EIR have occurred].) "Guideline 15164 [providing for addendums] is consistent with and furthers the objectives of Section 21166"; because initiating further environmental review whenever plans or circumstances change would result in an "intractable" agency decision making process, "the addendum process reasonably implements section 21166's objective of balancing the consideration of environmental consequences in public decision making with interests in finality and

efficiency." (*Save Our Heritage Organisation v. City of San Diego* (2018) 28 Cal.App.5th 656, 667-668, citing *Friends of the College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016) 1 Cal.5th 937, 949.)

An addendum is not required to be circulated for public review—it is extraordinarily uncommon to do so, and also legally pointless if not politically unwise in the instant case—but may simply be included in or attached to a Final EIR or negative declaration, and must be considered by the decision-making body together with the Final EIR or Negative Declaration before making a decision on the project. (14 Cal. Code Regs., §§ 15164(c), (d); *Citizens Against Airport Pollution, supra,* 227 Cal.App.4th at 797.) "The absence of a public review process for addendums comparable to initial or subsequent EIRs ... reflects the nature of an addendum as a document describing project revisions too insubstantial in their effect to require subsequent environmental review. The absence of public review also reflects the finality of adopted EIRs and section 21166's proscription against further environmental review except in specified circumstances." (*Save Our Heritage Organisation, supra,* 28 Cal.App.5th at 668.)

IV. None Of The Triggering Events That Would Allow The City To Require A Subsequent EIR Exist Here

A. None Of The Mitigating Project Modifications Could Possibly Constitute An Event Triggering The Requirement Of A Subsequent EIR

The "resumed" Project currently under consideration by the City in a glacially slow and cumbersome review process, and fully analyzed in the original complete and current revised FCS Addendum, is the same Project analyzed in the 2013 FEIR, solely excepting a handful of *environmentally-beneficial* modifications now incorporated in it by the Applicant as a result of *mitigations* raised in 2013 FEIR and the Addendum. These minor Project modifications, that on their face serve only to help the environment, include:

- Move western driveway entrance 100 feet to improve sight safety distance, and add refuge lane suggested by Public Works Department.
- Move eastern driveway entrance to add stacking distance as suggested by Public Works Department.
- Add right turn lane onto Deer Hill Road and extra lane for stacking area to turn into project.
- Add dedicated right turn lane for access to SR 24.
- Add bus turnout.

- Add 10-foot wide multi-use trail that meets with current cross-walk at freeway onramp.

- Add bridge to avoid creek impacts.

None of these environmentally-beneficial changes require "major revisions" to the 2013 FEIR. None involve or could involve new significant impacts. None substantially increase the severity of previously-identified significant impacts. All serve to *lessen* previously identified project impacts. Accordingly, no Project changes would require or allow a subsequent or supplemental EIR here.

B. No "Changed Circumstances" Or "New Information" Exist Which Could Possibly Trigger The Requirement Of A Subsequent EIR

Further, there is no substantial evidence showing substantial changes in surrounding circumstances or significant new information occurring since the 2013 FEIR that would require or allow "major revisions" to that EIR due to the involvement of new or substantially more severe significant effects. While Impact Sciences has recommended, or called for, new, revised or updated studies in several areas – e.g., air quality, GHG emissions, noise, population growth, energy, transportation, and wildfire – *as a matter of law* no studies or analysis in *any* of these areas could even *possibly* result in substantial evidence of events triggering CEQA's requirement for a subsequent or supplemental EIR under the circumstances present here.

For example, updated traffic counts showing existing conditions at the previously studied intersections will not show new or substantially more severe traffic impacts because the 2013 FEIR *already* analyzes and discloses significant unavoidable traffic impacts.[3] Moreover, any new studies or studies of expanded scope that could with reasonable diligence have been conducted at the time of the prior 2013 EIR, but were not, cannot serve to provide any "new information" of substantial importance within the meaning of CEQA that could lawfully support requiring a subsequent or supplemental EIR. (See, e.g., *Citizens Against Airport Pollution, supra,* 227 Cal.App.4th at 806-808 [no evidence of *new* information required preparation of supplemental EIR; information on potential environmental impact of GHG emissions and climate change was known *or could have been known* before city certified 1994 EIR and 2003 SEIR, and accordingly, there was no basis to require additional CEQA review, and eighth addendum to Airport Master Plan EIR was appropriate]; *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301, 1318-1320 [BAAQMD's adoption of new thresholds of significance for GHG emissions did not constitute significant "new information"

[3] Further, the City cannot conduct *expanded* – as opposed to *updated* – studies to try to show changed circumstances or new information because such bootstrapping machinations would themselves be equivalent to conducting a prohibited subsequent or supplemental EIR in violation of CEQA's bar on doing so.

requiring a supplemental EIR; even though EIR did not analyze GHGs, it conducted an air quality analysis and *could* have analyzed such impacts because information about GHGs had long been available to do so].)

Nor could any new guidelines or thresholds of significance for analyzing previously studied impacts constitute the requisite "changed circumstances" or "new information" needed to require a subsequent EIR. (*Concerned Dublin Citizens, supra,* 214 Cal.App.4th at 1320 [holding "the adoption of guidelines for analyzing and evaluating the significance of data does not constitute new information if the underlying information was known or should have been known at the time the EIR was certified"], citing *Fort Mojave Indian Tribe v. Department of Health Services* (1995) 38 Cal.App.4th 1574, 1605-1606, for proposition that "new regulation did not constitute new information requiring a supplemental environmental impact report.")

The following provides a few specific examples showing why no "changed circumstances" or "new information" could possibly meet CEQA's legal standards in any of the "updated study" areas referenced by Impact Sciences regardless of anything the City might legitimately study in this dubious, unnecessary additional processing:

- **GHG/Energy Impacts:** The 2013 FEIR contained a 20-page discussion of both the Project's GHG *and* its energy impacts in its chapter addressing GHG emissions. The FEIR imposed substantial mitigation measures in these areas to reduce GHGs and ensure the Project's energy efficiency, including ensuring the provision of shuttle service to the Lafayette BART station one mile away. (See 2013 FEIR at pp. 2-28 – 2-29.) The additional energy questions in the CEQA Initial Study checklist added in 2018, and referenced by Impact Sciences, do not constitute a "changed circumstance" or "new information."

  Both the GHG issue and the CEQA Guidelines' Appendix F requiring analysis of energy conservation and impacts existed at the time of and, indeed, long before the certification of the 2013 FEIR. There are no *facts* and no *data* constituting "changed circumstances" or "new information" regarding this Project's energy consumption, or its quantified incremental contribution to the global cumulative impact of worldwide GHG emissions, that were both unknown and could not have been known with reasonable diligence at the time of the 2013 EIR. Moreover, any new standards or thresholds for measuring or assessing the significance of the Project's GHG and energy impacts that post-date the 2013 FEIR cannot constitute the "changed circumstances" or "new information" required by CEQA to trigger a subsequent EIR *as a matter of law*. (*Citizens Against Airport Pollution, supra,* 227 Cal.App.4th at 807-808; *Concerned Dublin Citizens, supra,* 214 Cal.App.4th at 1320.)

- **Wildfire Impacts:** Wildfire risk was a topic specifically referenced and analyzed in the 2013 FEIR's Chapter 4.7 on Hazards/Hazardous Materials. In particular, the 2013 EIR specifically addressed and analyzed whether the Project would "[e]xpose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands" (DEIR, p. 4.7-14), and also specifically addressed and analyzed whether the Project would "impact implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan" (*id.,* p. 4.7-18) and concluded that impacts in both of those areas would be less than significant based on the Project's design, and required compliance with general plan vegetation management and State and local building code requirements.

  There are no "changed circumstances" and there is no "new information" relating to fire risk being caused or exacerbated by this essentially unchanged Project or its infrastructure that were not known, or that could not have been known with reasonable diligence, at the time of the 2013 FEIR, including but not limited to relevant adopted emergency response or evacuation plans, Project infrastructure and composition materials, and the layout and design of City streets.

  Even if changes in legal standards for impact analysis since the 2013 FEIR were relevant (which they are not), the only changes have been to *restrict* the scope of CEQA analysis by clarifying that CEQA generally only requires analysis of a project's impacts on the environment, not the environment's impact on future project occupants. (*California Bldg. Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 378.) Thus, the 2013 FEIR's analysis in this area was even broader and more expansive than currently allowed under CEQA, which may permissibly analyze only whether a new project creates or exacerbates an existing fire risk, not whether it exposes future recipients to already existing risk based on existing and unchanged circumstances.

- **Transportation/VMT Impacts:** VMT analysis is a relatively new measure of project transportation impacts that is designed to measure (and thus minimize) vehicle miles traveled to reduce GHGs. Its relatively recent emergence in the CEQA Guidelines was a result of 2013 legislation – SB 743 – that, *inter alia*, directed OPR to modernize traffic metrics and develop alternatives to the LOS approach. VMT analysis is not and was not legally required or conducted for this Project, and the 2013 EIR conducted its GHG,

traffic and transportation analyses based on other metrics (i.e., LOS) for measuring the significance of those Project impacts.

CEQA Guidelines § 15064.3, referenced by Impact Sciences, applies prospectively, not retroactively, and thus does not apply to this Project. Moreover, as discussed above, under CEQA's well-established subsequent review rules, new regulations or standards for measuring the significance of project impacts that arise after an EIR is certified do not constitute "changed circumstances" or "new information" allowing or requiring a subsequent EIR *as a matter of law.*

- **Noise Impacts:** Updating the 2013 FEIR's noise analysis with updated ambient noise measurements at nearby sensitive receptors that were previously studied, or that are newly existing as a result of changed circumstances, is a permissible analysis to determine whether the triggers for a subsequent EIR may be met. But Impact Science's apparent call for extensive new and quantified studies and analysis of Project construction noise because it "may not exceed but *may be close to* the noise limit criteria stated in the 2013 EIR and Lafayette Municipal Code" (4/5/19 Impact Science memo. at p. 10, emph. added) is completely unjustified and impermissibly calls for a de facto subsequent EIR analysis that is prohibited by CEQA absent substantial evidence of "changed circumstances" or "new information" showing major revisions to the 2013 EIR will be required due to the involvement of new significant impacts or substantially more severe significant impacts already identified. That noise impacts may be "close to" but "not exceed" the applicable threshold for a significant impact is patently insufficient to meet CEQA's high standard for preparing, and to overcome the strong presumption against and prohibition on preparing, a subsequent or supplemental EIR.

- **Air Quality:** As noted above, the 2013 EIR analyzes and discloses significant and unavoidable (SU) air quality impacts from Project construction equipment emissions for both criteria pollutants and particulate matter (DEIR at p. 2-13), including a significant cumulative impact in criteria pollutants exceeding BAAQMD's regional significance thresholds. (*Id.*, p. 2-15.) While the extensive and complete FCS Addendum shows these construction emissions impacts can be mitigated to a less than significant level through a new mitigation measure that O'Brien is willing to adopt – i.e., the use of Tier IV rather than Tier III engines – even if this were not the case and the impacts remained SU, no subsequent EIR could be required under CEQA's applicable standards. That is because even if the analysis ultimately showed the use of Tier IV engines was infeasible

or would not succeed in reducing these already identified impacts to a less than significant level, that would not constitute substantial evidence of "changed circumstances" or significant "new information" showing major EIR revisions were required due to new significant or substantially more severe significant impacts than those already identified, disclosed and discussed in the 2013 EIR.

V. Other Legally Erroneous Statements By The City And Impact Sciences

A. Legal Effect Of Factual Conclusions In EIR

Impact Sciences erroneously opines in its April 5, 2019 memo in various places that the factual conclusions in a certified EIR as to the significance of an impact cannot be changed unless based on "supporting analysis that occurred after the certification of the EIR" and that has been "reviewed," "validated" or "approved" by the lead agency. (4/5/19 memo at pp. 6, 9 [re: aesthetic and land use impacts].) That could not be more incorrect; specifically, these assertions materially misstate the actually applicable legal standards under CEQA as to the effect of factual statements and conclusions in an EIR on the authority of a lead agency's decision making body.

As you are no doubt aware, CEQA views an EIR as an *informational* document first and foremost, and is not concerned with whether its conclusions are "correct," but only with whether they have substantial evidence support. (*Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392 ["The court does not pass upon the correctness of the EIR's environmental conclusions, but only its sufficiency as an informational document."], quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 189.) Disagreement among experts – as was the case with respect to the 2013 FEIR's analysis of aesthetic and land use impacts of the Project – does not make an EIR inadequate. (*Greenebaum v. City of Los Angeles* (1984) 153 Cal.App.3d 391, 412.)

In the same vein, the body acting on an EIR is not required to "correctly resolve a dispute among experts" and where the evidence is conflicting it is "permitted to give more weight to some of the evidence and to favor the opinions and estimates of some of the experts over the others." (*Id.* at 413 [noting "[t]here was conflicting [expert] evidence and conflicting [expert] opinion and thus, the City Council was entitled to choose to believe one side more than the other."]; *see also Browning-Ferris Industries v. City Council* (1986) 181 Cal.App.3d 852, 863 ["An administrative agency may choose between differing expert opinions."]; *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1397 [same].) The decision-making body of a lead agency – in this case, the Planning Commission and the City Council only on appeal – is thus entitled to agree with experts and evidence other than those relied on by the EIR in reaching its ultimate factual findings and conclusions in the event of a conflict. Where the evidence on a factual matter is in conflict, the lead agency's decision-making body remains the final arbiter of what

experts and substantial evidence to credit, and what conclusions to reach, so long as the conclusions are supported by substantial evidence – and even if they differ from the final EIR's.

As observed in a leading CEQA treatise:

> An EIR's conclusion that an environmental impact is significant is not necessarily binding on the lead agency's decision-making body. The agency may find that a project will or will not result in a significant impact, despite a contrary conclusion in the EIR if the finding is supported by substantial evidence.

(2 Kostka & Zischke, *Practice Under the Environmental Quality Act* (CEB 2d ed. 2019), § 17.16, pp. 17-17 – 17-18, and authorities cited; *see* Pub. Resources Code, § 21082.2(a) ["The lead agency shall determine whether a project may have a significant effect on the environment based on substantial evidence in light of the whole record."]; § 21082.2(e) ["Statements in an environmental impact report and comments with respect to an environmental impact report shall not be deemed determinative of whether the project may have a significant effect on the environment."]; *San Franciscans for Livable Neighborhoods v. City and County of San Francisco* (2018) 26 Cal.App.5th 596, 682 ["agency decision not to identify an impact as significant is reviewed for substantial evidence"].)

To illustrate these principles, in one case, the court of appeal rejected a CEQA plaintiff's argument that a County's "Board [of Supervisors] violated CEQA by changing the environmental conclusion of the supplemental EIR prepared by staff to "less than significant."" (*Environmental Council v. Board of Supervisors* (1982) 135 Cal.App.3d 428, 438.) The court held: "As ultimate decision-maker, the Board had the *power* to change the findings in the EIR prepared by its staff." (*Ibid.*, emph. in orig.; see *id.* at 438 [noting "Board rescinded its prior certification of the staff-prepared EIR and was thus at liberty to change the environmental conclusion."].)

Further, "[t]hat the Board reached an environmental conclusion different from that of its staff did not vitiate the process of review, public comment, and consultation required under CEQA." (*Id.* at 438; *see also, Charles A. Pratt Construction Co., Inc. v. California Coastal Com.* (2008) 162 Cal.App.4th 1068, 1079-1080 [upholding Coastal Commission's rejection of EIR's environmental conclusion regarding project's groundwater recharge impacts; plaintiff "cites no authority that the Commission is bound by the findings in the EIR. Here the Commission simply rejected a conclusion that seems at best highly suspect."].)

Accordingly, and contrary to Impact Science's incorrect representation or understanding of the law, should the City Council choose to depart from the 2013 FEIR's conclusions that the Project's aesthetic and land use impacts are significant and unavoidable, it has the power and authority to do so in reliance on the contrary

expert evidence in the record regardless of when that substantial evidence was submitted.

B. Applicability Of CEQA's "Independent Judgment" Requirement

The City has also made repeated statements that it must exercise its "independent judgment," in an apparent effort to justify its commandeering and unilaterally "completing" the detailed and already complete Addendum that FCS has prepared as its expert work product, and which it has now revised to address Impact Science's peer review comments. Whatever the City's actual motivations in this regard, its purported legal justification is pure pretext.

The requirement to exercise "independent judgment" is found in CEQA Guidelines § 15090(a)(3), which applies to and sets forth the certification requirement for final EIRs – not addendums, which merely must be "considered" by the decision-making body before making a decision on a project (14 Cal. Code Regs. § 15164(c)) – and provides in relevant part that prior to approving a project the lead agency "shall certify that… [t]he final EIR reflects the lead agency's independent judgment and analysis." (14 Cal. Code Regs. § 15090(a)(3).) Even assuming solely for the sake of argument that this requirement applied to addendums – which it clearly does not on its face – it would not preclude a lead agency's reliance on an addendum drafted by an applicant's CEQA consultant.

It is clear that, even with EIRs, "the agency may enlist the initial drafting and analytical skills of an applicant's consultant (Pub. Resources Code, §§ 21082.1, subd. (a), 21100, subd. (a); Guidelines, § 15084, subd. (d)(3)), so long as the agency applies its "independent review and judgment to the work product before adopting and utilizing it." (*Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 359, 369, quoting *Friends of La Vina v. County of Los Angeles* (1991) 232 Cal.App.3d 1446, 1452-1455.) Per the Court of Appeal: "This methodology is common in California, and the Guidelines affirmatively endorse preparation of a draft EIR in th[is] manner[.]" (*Id.,* citing *La Vina*, at 1454.) The Court thus upheld the City of Eureka's use of an EIR where the draft was prepared by the applicant's counsel, reviewed and modified by City staff, and peer reviewed by the City's consultant (ESA), which provided its own input. (*Ibid; see id.* at 370 [holding substantial evidence supported finding "that the City conducted a detailed review and critique of the applicant's submission, and that it applied its "independent judgment and review to the work product" as it was required to do."].) If this is a permissible procedure for preparation of an EIR, then *a fortiori* a public agency can permissibly review, vet, and rely on an applicant-prepared addendum that is not even an "environmental document" as defined by CEQA (14 Cal. Code Regs. § 15361), and nothing in the law requires the agency itself to prepare the CEQA document much less an addendum.

The work of the applicant's expert environmental consultant here, FCS, has now been peer reviewed and commented on by the City's independent consultant, Impact Sciences, and FCS has been diligent and responsive in incorporating Impact Science's relevant suggestions and modifications. No legitimate "independent judgment" requirement or concern requires the City to commandeer FCS's Addendum, and the City's repeated attempts to do so appear to evidence its own desire to manipulate, and inject its own bias and subjectivity into, the CEQA process as it did before with the 2013 EIR.

C. Legal Standards For Deleting Or Modifying Mitigation Measures

Impact Sciences states in its April 5, 2019 memo with respect to no-longer-applicable mitigation measures requiring removal of asbestos-containing materials (ACMs) and lead-based paint (LBP) from buildings that no longer exist on the site: "For the Addendum to determine that the mitigation measures are no longer applicable, it should reference documentation confirming that ACMs and LBPs have been properly removed and disposed in compliance with applicable federal, state, and local regulations." (4/5/19 memo at p. 8.) It later states with respect to certain purported land use mitigation measures that the FCS Addendum found inapplicable: "The Addendum would provide CEQA clearance for the Resumed Project based on a certified EIR. Therefore, mitigation measures identified in the EIR remain applicable." (*Id.* at p. 8.) Elsewhere it appears to recognize that environmentally-beneficial project modifications can render an EIR's mitigation measures inapplicable, stating that in such cases the Addendum "should provide explanation of why [that is so]." (*Id.* at p. 11.)

Contrary to Impact Sciences' inconsistent and inaccurate statements regarding how the Addendum is required to treat inapplicable or no-longer-applicable mitigation measures proposed in the 2013 EIR, the law provides that even previously adopted mitigation measures can be deleted. (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 358-359.) To do so, "a governing body must state a legitimate reason for deleting an earlier adopted mitigation measure, and must support that statement of reason with substantial evidence." (*Id.* at 359.) Courts have upheld addendums deleting or changing mitigation measures that were "no longer necessary" where "no new or more severe impacts are caused by the deletions or changes to the mitigation measures." (*Mani Brothers Real Estate Group v. City of Los Angeles* (2007) 153 Cal.App.4th 1385, 1403.)

In *Mani Brothers*, the Court upheld those portions of an addendum to an EIR for a large downtown development project that deleted or revised certain mitigation measures, and held that a subsequent EIR was not required: "Nor does the City's decision to delete or revise certain mitigation measures warrant an SEIR. Mitigation measures adopted when a project is approved may be changed or deleted if the agency states a legitimate reason for making the changes and the reason is supported by substantial evidence. [Citing *Napa Citizens*.] Here, substantial

evidence supports deleting the measures because they are no longer necessary. [¶] ... [¶] Thus, substantial evidence in the record supports the reasons for the changes in the Modified Project's mitigation measures, and no new or more severe impacts are caused by the deletions or changes to the mitigation measures. Hence, no SEIR was required." (*Id.* at 1403; *see also Katzeff v. Department of Forestry & Fire Protection* (2010) 181 Cal.App.4th 601, 613-614 [citing *Mani Brothers* for proposition "no need for supplemental EIR rather than addendum to EIR where substantial evidence supported city's conclusion mitigation measures no longer necessary"].)

If a public agency can delete or modify a Final EIR's mitigation measures it has already adopted in connection with its approval of a project, then *a fortiori* it can delete or modify a certified Final EIR's proposed but not yet adopted mitigation measures for a project under consideration where they become unnecessary or inapplicable. As well documented by the record and the revised FCS Addendum, substantial evidence supports the Addendum's conclusions regarding unnecessary, non-existent or infeasible mitigation measures being inapplicable here.

VI. Conclusion

As can be seen from the above, FCS's conclusion – like your own oral and Impact Science's initial written conclusions – that an Addendum is sufficient to review the "resumed" Project under CEQA, is correct. It should be readily apparent to any objective and informed observer ***there is no realistic possibility that any of the events or conditions required to overcome CEQA's prohibition on subsequent or supplemental EIRs after a project EIR is certified will be established by substantial evidence here.*** Simply put, the City does not get a "do-over" after it has certified an EIR for a project and it does not get to conduct completely new or expanded scope environmental studies of *any* type that it could have, but did not, conduct before simply in order to improperly attempt to justify an unauthorized subsequent or supplemental EIR or placate dedicated NIMBYs; as demonstrated above, such an "intractable" decision-making process is ***prohibited*** by CEQA.

Should the City choose to violate CEQA by attempting to unlawfully subject the Terraces of Lafayette Project to a subsequent or supplemental EIR here, O'Brien reserves all its rights and remedies to challenge that decision.

Very truly yours,

MILLER STARR REGALIA

Arthur F. Coon

AFC:klw
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EXHIBIT C

Indoor Air Quality in New California Homes with Mechanical Ventilation

Wanyu Chan[1,*], Yang-Seon Kim[1], Brett Singer[1], Iain Walker[1]

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SUMMARY
The Healthy Efficient New Gas Homes (HENGH) study measured indoor air quality and mechanical ventilation use in 70 new California homes. This paper summarizes preliminary results collected from 42 homes. In addition to measurements of formaldehyde, nitrogen dioxide (NO_2), and $PM_{2.5}$ that are discussed here, HENGH also monitored other indoor environmental parameters (e.g., CO_2) and indoor activities (e.g., cooking, fan use) using sensors and occupant logs. Each home was monitored for one week. Diagnostic tests were performed to characterize building envelope and duct leakage, and mechanical system airflow. Comparisons of indoor formaldehyde, NO_2, and $PM_{2.5}$ with a prior California New Home Study (CNHS) (Offermann, 2009) suggest that contaminant levels are lower than measured from about 10 years ago. The role of mechanical ventilation on indoor contaminant levels will be evaluated.

KEYWORDS
Formaldehyde; nitrogen dioxide; particles; home performance; field study

1 INTRODUCTION

The HENGH field study (2016–2018) aimed to measure indoor air quality in 70 new California homes that have mechanical ventilation. Eligible houses were built in 2011 or later; had an operable whole-dwelling mechanical ventilation system; used natural gas for space heating, water heating, and/or cooking; and had no smoking in the home. Study participants were asked to rely on mechanical ventilation and avoid window use during the one-week monitoring period. All homes had a venting kitchen range hood or over the range microwave and bathroom exhaust fans. This paper presents summary results of formaldehyde, NO_2, and $PM_{2.5}$ measurements in 42 homes. The full dataset is expected to be available in summer 2018.

2 METHODS

Integrated one-week concentrations of formaldehyde and NO_x were measured using SKC UMEx-100 and Ogawa passive samplers. Formaldehyde samplers were deployed in the main living space, master bedroom, and outdoors. $PM_{2.5}$ were measured using a pair of photometers (ES-642/BT-645, MetOne Instruments) indoor in the main living space and outdoors. $PM_{2.5}$ filter samples were collected using a co-located pDR-1500 (ThermoFisher) in a subset of the homes and time-resolved photometer data were adjusted using the gravimetric measurements. Results are compared with a prior field study CNHS (2007–2008) (Offermann, 2009) that monitored for contaminant concentrations over a 24-hour period in 108 homes built between 2002 and 2004, including a subset of 26 homes with whole-dwelling mechanical ventilation.

3 RESULTS

Figure 1 compares the indoor concentrations of formaldehyde, NO_2, and $PM_{2.5}$ measured by the two studies. Results of HENGH are one-week averaged concentrations, whereas CHNS are 24-hour averages. HENGH measured lower indoor concentrations of formaldehyde and $PM_{2.5}$, compared to CNHS. For NO_2, the indoor concentrations measured by the two studies

are similar. Summary statistics of indoor and outdoor contaminant concentrations (mean and median concentrations; N=number of homes with available data) are presented in Table 1.

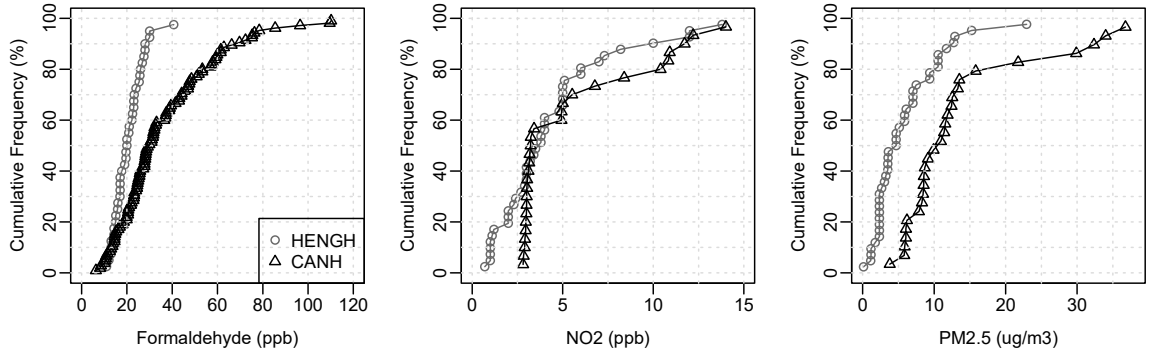


Figure 1. Comparisons of indoor contaminant concentrations measured by two studies.

Table 1. Summary statistics of indoor and outdoor contaminant concentrations.

	HENGH - Indoor			CNHS - Indoor			HENGH - Outdoor			CNHS - Outdoor		
	N	Median	Mean	N	Median	Mean	N	Median	Mean	N	Median	Mean
Formaldehyde (ppb)	39	20.0	20.6	104	29.5	36.3	38	2.0	2.0	43	1.8	2.8
NO_2 (ppb)	40	3.7	4.4	29	3.2	5.4	40	3.0	3.1	11	3.1	3.5
$PM_{2.5}$ (ug/m^3)	41	4.7	5.8	28	10.4	13.3	42	5.9	7.7	11	8.7	7.9

4 DISCUSSION

The lower formaldehyde concentrations measured by HENGH in comparison to CNHS may be attributable to California's regulation to limit formaldehyde emissions from composite wood products that came into effect between the two studies. Gas cooking is a significant source of indoor NO_2 (Mullen et al., 2016). Even though NO_2 concentrations measured by HENGH are similar to levels found in CNHS, the two studies differed in that HENGH homes all use gas for cooking, whereas almost all homes (98%) from the prior study used electric ranges. More analysis is needed to determine the effectiveness of source control, such as range hood use during cooking, on indoor concentrations of cooking emissions such as NO_2 and $PM_{2.5}$. Lower $PM_{2.5}$ indoors measured by HENGH compared to CNHS may be explained from a combination of lower outdoor $PM_{2.5}$ levels, reduced particle penetration due to tighter building envelopes (Stephens and Siegel, 2012) combined with exhaust ventilation, and use of medium efficiency air filter (MERV 11 or better) in some HENGH homes. Further analysis of the data will evaluate the role of mechanical ventilation, including local exhaust and whole-dwelling ventilation system, on measured indoor contaminant levels.

5 CONCLUSIONS

New California homes now have lower indoor formaldehyde levels than previously measured, likely as a result of California's formaldehyde emission standards. Indoor concentrations of NO_2 and $PM_{2.5}$ measured are also low compared to a prior study of new homes in California.

ACKNOWLEDGEMENT

LBNL work on the project was supported by the California Energy Commission. Field data collection was performed by the Gas Technology Institute. Support for field teams was provided by Pacific Gas & Electric and the Southern California Gas Company.

6 REFERENCES

Mullen NA et al. 2016 *Indoor Air* 26(2):231–245.

Offermann FJ. 2009. California Air Resource Board and California Energy Commission Report CEC-500-2009-085.
Stephens B, Siegel JA. 2012 *Indoor Air* 22(6):501–513.

EXHIBIT D

Memorandum

Date: 3/5/2020

To: Michael Griffiths

From: Lin Zhang, PhD, PE, TE, PTOE
Elite Transportation Group, Inc. (ETG)

Subject: **Peer Review of Updated Traffic Study for the Proposed Terraces of Lafayette Project**

EXECUTIVE SUMMARY

This memorandum provides a summary of a peer review of the updated traffic impact study prepared by TJKM (hereinafter referred to as **updated traffic study**) for the proposed Terraces of Lafayette Project (hereinafter referred to as **proposed project**). The following areas are identified by Elite Transportation Group, Inc. (ETG) either unmitigable or inadequate:

- It was not clear whether the traffic analysis models used for the queueing and weaving analyses were calibrated to the local traffic condition. The conclusions drawn upon the model results would be questionable if the models were not properly calibrated.
- The proposed project would result in a significant and unavoidable impacts on the level of service at Pleasant Hill Road/Deer Hill Road intersection, as well as delay on Pleasant Hill Road.
- The projected delay indices used in the updated traffic study significantly underestimated the congestion level on Pleasant Hill Road and SR 24.
- Crossing three lanes for vehicles existing westbound SR 24 off-ramp to access the extended northbound left-turn lane at the intersection of Pleasant Hill Road/Deer Hill Road in this heavily congested short segment (approximately 600 feet only) will not only cause additional delay, but also pose safety risks. However, these impacts were not fully studied or mitigated.
- For a congested and gridlocked arterial such as Pleasant Hill Road during peak hours, installing Emergency vehicle preemption (EVP) would not fully mitigate the impact of the proposed project on emergency response time.
- The net loss of 15 parking spaces on Pleasant Hill Road would result in a significant impact on passenger loading.
- The proposed bicycle lane between Deer Hill Road and SR 24 on-ramp would create major conflict zones between bicycles and passenger-loading vehicles, between bicycles and vehicles in the trap lane, and between bicycles and vehicles entering & existing the property driveway.
- Analysis of impacts to traffic, noise, and pollution was not performed for the massive amount of heavy trucks in the grading stage of construction (approximately 45 heavy truck trips per hour).
- The updated traffic study lacks an analysis to quantify the traffic impact of the proposed project during wildfires and PG&E's power shut-offs. Also, an evacuation plan for the residents inside the Very High Fire Hazard Severity Zones (VHFHSZ) needs to be developed or updated.
- The updated traffic study omitted the analysis of the significant impact of the proposed project on westbound queues at the intersection of Laurel Drive/Deer Hill Road in the AM peak period under the Plus Project scenarios.

FIELD VISIT

To gain local knowledge of the study area, ETG conducted a field visit along Pleasant Hill Road between Withers Avenue and Old Tunnel Road, and Deer Hill Road between First Street and Pleasant Hill Road on October 22, 2019 (Tuesday), during AM peak, School peak, and PM peak periods.

On Pleasant Hill Road, our observations indicated that it experienced the most congestion in the southbound direction during the AM peak period. The southbound queue in the AM peak period extended as far as 1,500 feet north of Rancho View Drive. In the PM peak period, the northbound Pleasant Hill Road experienced congestion near the intersection at Pleasant Hill Road and Stanley Blvd/Deer Hill Rd, with the longest queue extending about 2,000 feet south of this intersection.

On Deer Hill Road, it was observed that there was an excessive left-turn queue on the westbound approach at the intersection of Deer Hill Road and Laurel Drive in the AM peak period. During the PM peak period, the eastbound Deer Hill Road experienced severe congestion with the longest queue extending more than one mile from the intersection of Pleasant Hill Road/Deer Hill Road/Stanley Boulevard.

ETG also conducted several travel time runs during the field visit. **Table 1** lists the average travel times and the delay indices in each peak direction of Pleasant Hill Road between Withers Avenue and Old Tunnel Road (approximately 2.8 miles). Note that the delay indices were calculated using the estimated free-flow travel time from Google Maps. Each average travel time was based on several travel time runs. **Table 1** also lists the Contra Costa Transportation Authority (CCTA) 2017 Multimodal Traffic Service Objectives (MTSO) delay indices, as well as the 2019 projected delay indices calculated by TJKM. The delay indices will be discussed in more detail in the next section.

Table 1. Travel Time and Delay Index - Pleasant Hill Road

Direction	Period	Average Travel Time (min)	Free-Flow Travel Time (min)	Delay Index	2017 MTSO Delay Index	2019 Projected (TJKM)
SB	AM Peak	16.4	5.5	2.98	2.4	1.34
NB	School Peak	7.4	5.5	1.35	-	-
NB	PM Peak	11.4	5.5	2.07	2.0	1.74

PEER REVIEW FINDINGS

Latest Traffic Data

The updated traffic study collected the turning movement counts at all 17 study intersections on April 30, 2019, and one intersection only at Pleasant Hill Road/Deer Hill Road/Stanley Boulevard on May 2, 2019. The counts at all study intersections were later scaled up based on the day-to-day traffic variation at the Pleasant Hill Road/Deer Hill Road/Stanley Boulevard intersection between April 30 and May 2, 2019, for the analysis.

The typical practice of collecting turning movement counts at an intersection is to collect counts on two midweek days and use the average for analysis. It is not certain that it was a budget constraint that did not allow the new data collection to cover two days at all study intersections. However, scaling up counts to a higher level would result in a more conservative analysis.

For the signal timing data, the updated study used the latest timings at intersections on Pleasant Hill Road provided by the City of Lafayette. However, for other signalized study intersections not on Pleasant Hill Road, default parameters were assumed, instead of using the actual signal timings, for unstated reasons.

Study Area Coverage

The study area in the updated study remains the same as the 2012 study. Based on our field visit observations, this study area is sufficient for the traffic impact analysis of the proposed Terraces of Lafayette project.

Analysis Methodologies

ETG evaluated the methodologies used in the updated traffic study, including the following:

- **Traffic Forecast** – The updated study used the latest CCTA Traffic Forecasting Model base year (2018) and future year (2040) outputs to calculate the annual average growth rate. This growth rate was later applied to the adjusted 2019 counts to estimate 2040 traffic. This is a reasonable and common practice.
- **Level of Service (LOS) Analysis** – The updated study used the Highway Capacity Manual (HCM) 2010 methodologies to determine LOS for the study intersections. This is different from the 2012 study that used the HCM 2000 methodologies, but is compliant with CCTA's preference as listed in the CCTA Technical Procedures.
- **Signal Warrant** – The updated study conducted peak hour signal warrant analyses for unsignalized intersections using the 2014 California Manual on Uniform Traffic Control Devices (MUTCD), which is the latest version of the manual. This is a reasonable and common practice.
- **Queuing Analysis** – Similar to the 2012 study, the updated study used the simulation approach to conduct queuing analysis. The simulated 95th percentile queue lengths were used to determine whether the existing turn-lanes provide sufficient storage. However, it was not mentioned in the report whether the simulation model was calibrated to the local traffic condition. Model calibration is the process of adjusting model parameters (which initially are defaults) to obtain a model that replicates the existing traffic conditions. Model calibration is critical in that it ensures that a traffic simulation model is able to reproduce the local traffic condition and is proper to use for analyzing alternatives or scenarios. For a corridor study, travel time is the most common performance measure that is used in model calibration. It was not clear from the updated study report if the traffic analysis models were calibrated. If the traffic analysis models were not calibrated, then the models would be unreliable and the conclusions drawn from the analysis would be questionable. TJKM should explain the calibration methods used.
- **Weaving Analysis** – It was concerned that the proposed project would worsen the weaving condition on Pleasant Hill Road between freeway ramps and nearby intersections. The updated study employed a similar simulation approach as used in the 2012 study to evaluate the impact

of the proposed project on weaving activities. However, it was not mentioned in the report whether the simulation model was calibrated to the local traffic condition.

- **Delay Index** – The Delay Index (DI) is an expression of the amount of time required to travel between two points during the peak hour as compared to the free-flow travel time baseline. The delay index is defined as: $Delay\ Index = \frac{Congested\ Peak-Hour\ Travel\ Time}{Free-Flow\ Travel\ Time}$. The updated traffic study estimated the 2019 delay indices for Pleasant Hill Road and SR 24 by using the 2013 MTSO monitoring results and growth rates between 2013 and 2019. It was stated in the report that the 2017 MTSO monitoring results for Pleasant Hill Road and SR 24 overestimated the existing delay index, therefore, the 2013 results were used to estimate the 2019 delay index. However, the 2017 MTSO monitoring results were based on INRIX data. INRIX gathers and aggregates data collected from a wide range of anonymous GPS-equipped devices (e.g., smartphones), and thus provides much better coverage of travel time data compared to traditional travel time tach runs (i.e., floating car survey). INRIX data has been validated and recognized as a reliable data source, and has been used by many agencies and organizations nationwide and locally in the Bay Area for congestion monitoring and other traffic-related projects. In addition, our travel time runs on Pleasant Hill Road conducted on October 22, 2019, show that the existing delay indices are higher but close to the 2017 monitoring results (**Table 1**). Therefore, our assessment is that the projected delay indices used in the updated traffic study significantly underestimated the congestion level on Pleasant Hill Road. See below under the heading Impacts on SR 24 for our similar comments on the impacts on Highway 24.

Trip Generation Calculations

The 2012 study calculated trip generations using the ITE Trip Generation Manual, 8th Edition. Since the 10th edition of the Manual was published in 2017, the updated traffic study calculated trip generation based on the latest Manual (i.e., 10th edition). However, because the new trip generation resulted in fewer trips than the original one in the 2012 study, the updated traffic study used the original trip generation for the analysis. As stated in the report, the proposed project was classified as "Multifamily Housing (Mid-Rise)" according to the latest Manual but was classified as "Apartments" based on the older version of the Manual. The change of land use classification would result in over a 25% reduction in trip generation, although it is unclear how such a change is warranted since we understand that half the buildings are 2-story and half are 3-story. The updated study report included the 10th Edition-based trip generation for comparison purposes only, but applied the higher trip generation used in the 2012 study.

We verified and confirmed that the trip generation calculations using both the 8th and 10th Edition of the Traffic Generation Manual in the updated traffic study report are valid.

Trip Distribution Assumptions

The updated study retained the trip distribution that was manually estimated in the 2012 study, because "it was determined that the 'plus project' model results could not be relied upon". It was not certain if it was caused by the model not being sensitive to the proposed project.

We reviewed the assumed trip distribution and they are reasonable given the traffic conditions in the study area.

Assumptions for Future Year Cumulative Scenarios

The future year was set as 2040 in the updated traffic study, which is reasonable and consistent with the future year of the latest CCTA Traffic Forecasting Model. The growth rate used to estimate 2040 traffic was derived based on the CCTA model outputs of the base year and future year. This is a common practice.

Impacts on Emergency Vehicles

Emergency vehicle preemption (EVP) system was recommended in the original study as the mitigation measure for the impact of the proposed project on emergency response time. Opticom, as one of the widely used EVP equipment in the US, was mentioned in the original study. EVP was retained in the updated traffic study to mitigate the impact on emergency response time.

While EVP enables faster emergency response, congestion and gridlock can prevent emergency vehicles from reaching the preemptive detection range at equipped signalized intersections. The priority logic used in the current EVP equipment (e.g., Opticom) does not consider congested queuing conditions such as the one on Pleasant Hill Road as shown in **Figure 1**. The technique that uses queue-based offset to adjust preemption time is still at the research and development stage, and thus not available to use yet.

Figure 1. Emergency Vehicle Stuck in Traffic Congestion on Pleasant Hill Road

Our assessment is that EVP equipment (e.g., Opticom) can help reduce emergency response time under non-congested or slightly-congested traffic conditions. However, for a congested and gridlocked arterial such as Pleasant Hill Road during the peak hours, the impact on emergency response time due to additional congestion caused by the proposed project is unlikely to be fully mitigated by installing EVP equipment. No analysis in the updated traffic report has shown emergency response time reduction by using EVP equipment on Pleasant Hill Road. Therefore, this impact is deemed significant and unavoidable.

Impacts during Construction

According to the traffic study report, grading on the proposed project site during construction would result in approximately 25,000 to 30,000 haul trips over a nine-month period. The traffic study assumed five-day work weeks, this would result in an average of approximately 150 haul trips per day, for a total of 300 truck trips (150 arriving empty, 150 leaving full) per day. The traffic study report suggested that large trucks should be prohibited during the hours of 7:00 to 9:00 a.m. and 3:00 to 7:00 p.m. on any school day, and 7:00 to 9:00 a.m. and 4:00-7:00 p.m. on any non-school weekday. This would result in six (6) to seven (7) hours per workday for active hauling operations. However, the traffic study report assumed eight (8) hours per workday instead, which resulted in an average of approximately 40 truck trips per hour. Our estimate is an average of approximately 45 truck trips per hour. This large amount of heavy truck traffic during construction will result in not only excessive intersection delay at the intersection of Pleasant Hill Road and Deer Hill Road/Stanley Boulevard, but also new traffic hazards when changing lanes or making wide turns when maneuvering on Pleasant Hill Road and Deer Hill Road. The updated traffic study report recommended to limit truck traffic to off-peak times, but did not analyze the potential impacts. Analysis should have been performed considering the massive amount of heavy trucks in the grading stage of construction (approximately 45 heavy truck trips per hour). The noise and pollution impacts of this amount of truck activity should be analyzed elsewhere in the CEQA analysis.

Weaving Activities

It was concerned that the proposed project would worsen the weaving condition on Pleasant Hill Road between freeway ramps and nearby intersections, especially when the original design allows full access at the proposed driveway on Pleasant Hill Road. The revised design has prohibited left-turn in/out at this driveway. In addition, the simulation experiments carried out in the updated traffic study show that the additional traffic due to the proposed project has little impact on traffic speeds along this weaving section. However, it was not clear in the updated traffic study report if the simulation models were calibrated to represent the real congestion level on Pleasant Hill Road. If the traffic analysis models were not calibrated, then the models would be unreliable and the conclusions drawn from the analysis would be questionable.

Furthermore, the updated traffic study states that the northbound to westbound left-turn lane at the intersection of Pleasant Hill Road/Deer Hill Road/Stanley Boulevard will be extended further south. This will result in approximately 600 feet only between the westbound SR 24 to northbound Pleasant Hill Road off-ramp and the extended northbound left-turn lane. Based on the estimated project trip generation, during the PM peak hour, there will be about 30 project-generated vehicles which will have to cross three lanes in order to access the left-turn lane from the off-ramp. Crossing three lanes in this

heavily congested short segment (approximately 600 feet) will not only cause additional delay, but also pose safety risks. However, these impacts were not fully studied or mitigated in the updated traffic study.

Impacts on SR 24

The updated traffic study used delay index to evaluate the impacts of the proposed project on SR 24 between the Caldecott Tunnel and I-680. it was stated in the report that the 2017 MTSO monitoring results for SR 24 overestimated the existing delay index, and therefore the 2013 results were used to estimate the 2019 delay index. As stated earlier, the 2017 MTSO monitoring results were based on INRIX data which has been validated and recognized as a reliable data source. We also performed a quick check using the Google Map peak-period travel times to calculate the delay index, as shown in **Table 2**. It can be seen that the Google Map-based delay indices are similar to the 2017 MTSO delay indices. Our assessment is that the projected delay indices used in the updated traffic study significantly underestimated the congestion level on SR 24.

Table 2. Travel Time and Delay Index – SR 24

Direction	Period	Average Travel Time (min)	Free-Flow Travel Time (min)	Delay Index	2017 MTSO Delay Index	2019 Projected (TJKM)
WB	AM Peak	20.3	10	2.03	2.0	1.7
EB	PM Peak	22.9	10	2.29	2.3	1.4

Site Access

As stated in the updated study report, several changes were made in the updated site plan:

- Driveway on Pleasant Hill Road permits only right-turn in/out
- Relocated east driveway on Deer Hill Road permits full access with an exclusive left-turn lane
- Relocated west driveway on Deer Hill Road permits only right-turn in/out and left-turn out with a median refuge lane

Our assessment is that compared to the original design used in the 2012 study, these changes would reduce interruptions to the existing traffic on Pleasant Hill Road and Deer Hill Road. The relocated east driveway on Deer Hill Road is further away from the intersection at Pleasant Hill Road/Deer Hill Road, which would provide more left-turn lane storage and some safety benefits, although allowing left turns out of this driveway could still be problematic given limited visibility, the steepness of Deer Hill Road at this point and the speed and momentum of traffic coming down the hill in off-peak times.

Parking Supply inside Development

The updated study used the same parking requirements by unit size as in the 2012 study. The calculated parking demand is 511 spaces and the updated parking supply is 557 spaces, which is slightly different from the original parking supply of 567 spaces. The conclusion that the project would have a less-than-significant impact on surrounding roadways since parking supply inside the development is sufficient.

Passenger Loading and On-Street Parking

As stated in the updated traffic study report, the proposed project would remove 19 on-street parking spaces along Pleasant Hill Road south of Deer Hill Road. These parking spaces are heavily used especially for student pick-ups in the afternoon for the nearby Acalanes High School, as illustrated in **Figure 2**. It was stated in the report that the new loading area could accommodate approximately eight (8) waiting vehicles. However, there is already an existing passenger loading zone between the intersection of Pleasant Hill Road/Deer Hill Road and the existing parking spaces that accommodate about four (4) vehicles. The net loss of 15 parking spaces (i.e., 19+4-8=15) would result in a significant impact on passenger loading in the study area, which contradicts the conclusion in the updated traffic study report.

Figure 2. Utilization of Existing Passenger Loading Zone & Parking Spaces (West Side of Pleasant Hill Road, South of Deer Hill Road)

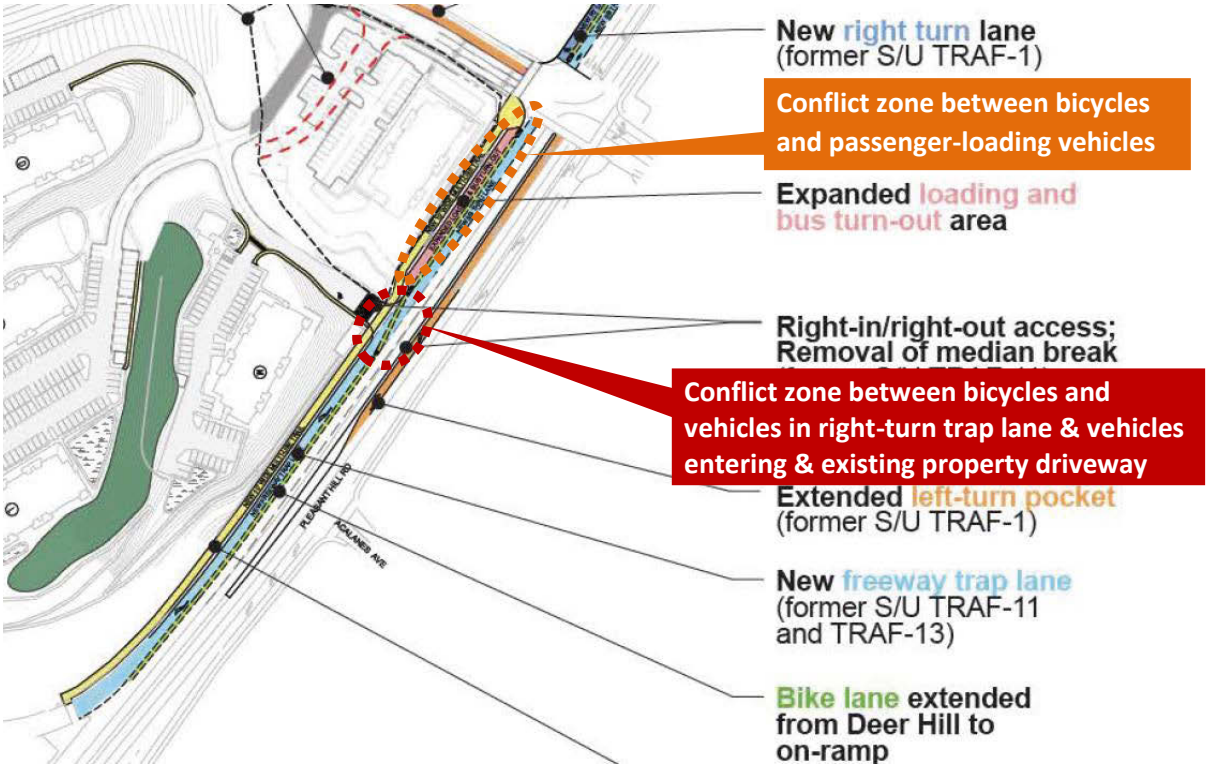
Bike Lane

The proposed bicycle lane between Deer Hill Road and SR 24 on-ramp would be located between the right-turn trap lane and through lanes, as illustrated in **Figure 3**. This will create two major neighboring conflict zones for bicycles, as listed below.

- Conflict zone between bicycles and passenger-loading vehicles, as illustrated in the area circled in orange.
- Conflict zone between bicycles and vehicles in the right-turn trap lane where bicycles need to cross the trap lane, and between bicycles and vehicles entering & existing the property driveway, as illustrated in the area circled in red.

The updated traffic study did not address these significant conflicts in the neighboring conflict zones between bicycles and vehicles.

Figure 3. Bicycle Conflict Zones



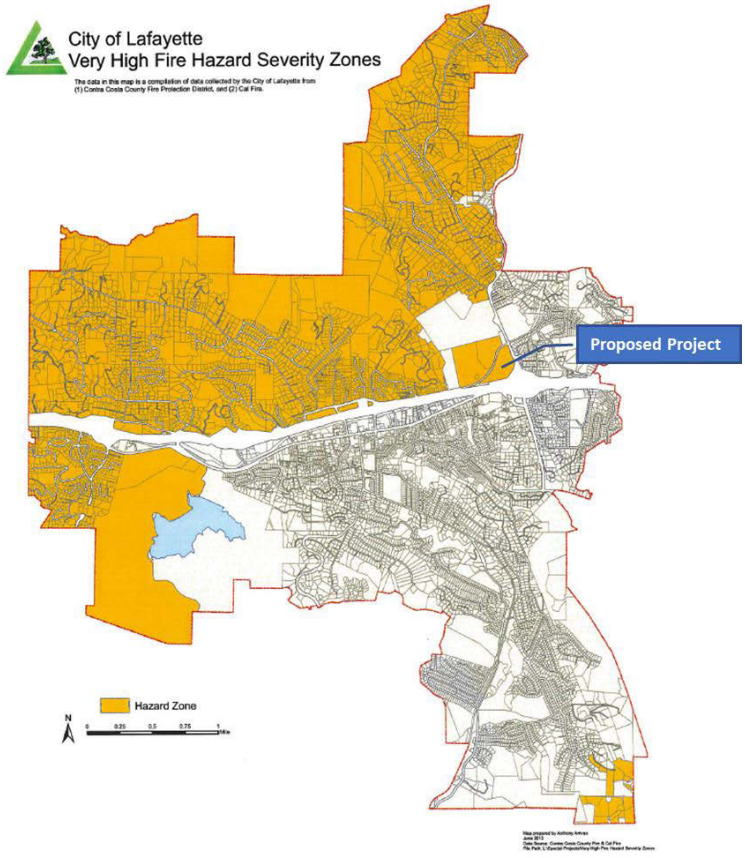
Wildfire, PG&E Power Shut-off, and Evacuation Plan

It is worth noting that the proposed project is located in the Very High Fire Hazard Severity Zones (VHFHSZ) according to the City Ordinance No. 620 (**Figure 4)**. Given the facts that: 1) semi-rural/urban interface wildfires have become a new reality; 2) all three fire stations within the study area use Pleasant Hill Road, and 3) all three fire stations fail to meet the target response time of five minutes, the extra delay on Pleasant Hill Road caused by the proposed project would worsen emergency response time as well as resident evacuation.

In addition, PG&E's power shut-offs, as a proactive measure to help avoid wildfires, have been affecting the study area and surrounding areas. As a consequence, affected signalized intersections become all-way-stop-controlled intersections due to traffic signal blackout (which would also affect any proposed EVP system also). It is recommended that the study should include an analysis to quantify the traffic impact of the proposed project under such conditions.

In addition, an evacuation plan for the residents in the area should be considered and how the proposed project would impact evacuation routes and emergency vehicles access if the proposed 315 units are being evacuated at the same time.

Figure 4. Very High Fire Hazard Severity Zones, City of Lafayette[1]



Other Issues

Significant and Unavoidable Impacts – According to the updated traffic study report, the proposed project would result in significant and unavoidable impacts on the level of service at the intersection of Pleasant Hill Road/Deer Hill Road/Stanley Boulevard and the delay index on Pleasant Hill Road, unless a third southbound through lane were added to Pleasant Hill Road between north of Deer Hill Road and SR-24. However, as discussed earlier, the projected delay indices used in the updated traffic study significantly underestimated the congestion level on Pleasant Hill Road. Therefore, it cannot be claimed for sure that a third southbound through lane will be able to mitigate the proposed project. In addition, the Gateway Constraints Policy outlined in the Lamorinda Action Plan precludes adding more through lanes. Pleasant Hill Road is used as an alternative route by traffic heading south on I-680 in the AM Peak period. One of the rationales for the Gateway Constraints Policy is the recognition that any improvement in through traffic flow on Pleasant Hill Road is likely to attract more traffic from I-680. Therefore, this impact is considered significant and unmitigable.

Excessive Queue at Laurel Drive/Deer Hill Road – During our field visit, excessive left-turn queues were observed on the westbound approach of Laurel Drive/Deer Hill Road intersection in the AM peak period. According to the 95th percentile queue lengths included in the queuing and blocking reports (Appendix

[1] https://www.lovelafayette.org/Home/ShowDocument?id=1950

C, D, E and F in the updated traffic study report), the proposed project would cause significant impact at this intersection under Existing Plus Project scenario. No discussion on this impact or corresponding mitigation measures were mentioned in the updated traffic study.

SUMMARY

Elite Transportation Group, Inc. (ETG) conducted a peer review of the updated traffic study report for the proposed Terraces of Lafayette project. The following areas are identified either unmitigable or inadequate:

- It was not clear from the updated traffic study report whether the traffic analysis models were calibrated to the local traffic condition before being used for traffic analysis, including queuing and weaving analysis. If the traffic analysis models were not calibrated, then the models would be unreliable and the conclusions drawn from the analysis would be questionable.
- The proposed project would result in significant and unavoidable impacts on the level of service at the intersection of Pleasant Hill Road/Deer Hill Road/Stanley Boulevard and the delay index on Pleasant Hill Road, unless a third southbound through lane were added to Pleasant Hill Road between north of Deer Hill Road and SR 24. However, the projected delay indices used in the updated traffic study significantly underestimated the congestion level on Pleasant Hill Road. Therefore, it cannot be claimed that a third southbound through lane will certainly be able to mitigate the proposed project. In addition, the Gateway Constraints Policy outlined in the Lamorinda Action Plan precludes adding more through lanes. Pleasant Hill Road is used as an alternative route by traffic heading south on I-680 in the AM Peak period. One of the rationales for the Gateway Constraints Policy is the recognition that any improvement in through traffic flow on Pleasant Hill Road is likely to attract more traffic from I-680. Therefore, this impact is considered significant and unmitigable.
- The updated traffic study stated that the 2017 MTSO monitoring results for Pleasant Hill Road and SR 24 overestimated the existing delay index, therefore, the 2013 results were used to estimate the 2019 delay index. However, the 2017 MTSO results were based on INRIX data, which has been validated and recognized as a reliable data source and has been used in many traffic-related projects. In addition, our travel time runs on Pleasant Hill Road conducted on October 22, 2019, show that the existing delay indices are higher but close to the 2017 monitoring results. The Google map-based delay indices are similar to the 2017 MTSO delay indices on SR 24. Therefore, our assessment is that the projected delay indices used in the updated traffic study significantly underestimated the congestion level on Pleasant Hill Road and SR 24.
- The northbound to westbound left-turn lane at the intersection of Pleasant Hill Road/Deer Hill Road/Stanley Boulevard will be extended further south based on the project site plan and the updated traffic study, which will result in approximately 600 feet only between the westbound SR 24 to northbound Pleasant Hill Road off-ramp and the extended northbound left-turn lane. During the PM peak hour, there will be about 30 project-generated vehicles exiting westbound SR 24 off-ramp which will have to cross three lanes in order to access the northbound left-turn lane. Crossing three lanes in this heavily congested short segment (approximately 600 feet) would not only cause additional delay, but also pose safety risks. However, these impacts were not fully studied or mitigated in the updated traffic study.
- Emergency vehicle preemption (EVP) equipment can help reduce emergency response time under non-congested or slightly-congested traffic conditions. For a congested and gridlocked arterial such as Pleasant Hill Road during peak hours, installing EVP would not fully mitigate the

impact of the proposed project on emergency response time. No analysis in the updated traffic report has shown emergency response time reduction by using EVP equipment on Pleasant Hill Road. This impact is deemed significant and unavoidable.

- The proposed project would remove 19 on-street parking spaces along Pleasant Hill Road south of Deer Hill Road. These parking spaces are heavily used especially for student pick-ups in the afternoon for the nearby Acalanes High School. It was stated in the report that the new loading area could accommodate approximately eight (8) waiting vehicles. The existing passenger loading zone can accommodate about four (4) vehicles. The net loss of 15 parking spaces would result in a significant impact on passenger loading in the study area and therefore deemed significant.
- The proposed bicycle lane between Deer Hill Road and SR 24 on-ramp would be located between the right-turn trap lane and through lanes. This will create major neighboring conflict zones - between bicycles and passenger-loading vehicles, between bicycles and vehicles in the right-turn trap lane where bicycles need to cross the trap lane, and between bicycles and vehicles entering & existing the property driveway. These significant conflicts in the conflict zones were not addressed in the updated traffic study.
- Grading on the proposed project site during construction would result in approximately 25,000 to 30,000 haul trips over a nine-month period. Our estimation shows 45 trucks per hour for seven (7) hours per weekday given that the construction trucks will avoid peak hours. This large amount of heavy truck traffic during construction will result in not only excessive intersection delay at the intersection of Pleasant Hill Road and Deer Hill Road/Stanley Boulevard, but also new traffic hazards when changing lanes or making wide turns when maneuvering on Pleasant Hill Road and Deer Hill Road. The updated traffic study report recommended to limit truck traffic to off-peak times, but did not analyze the potential impacts. Analysis should have been performed considering the massive amount of heavy trucks in the grading stage of construction (approximately 45 heavy truck trips per hour). The noise and pollution impacts of this amount of truck activity should be analyzed elsewhere in the CEQA analysis.
- Considering that the proposed project is located in the Very High Fire Hazard Severity Zones (VHFHSZ), as well as PG&E's power shut-offs as a proactive measure to help avoid wildfires, the study should include an analysis to quantify the traffic impact of the proposed project under such conditions. In addition, an evacuation plan for the residents inside the VHFHSZ needs to be developed or updated, given the new reality of wildfires and proximity to Acalanes High School buildings and student parking lot.
- During the field visit, excessive left-turn queues were observed on the westbound approach at the intersection of Laurel Drive/Deer Hill Road in the AM peak period. According to the 95th percentile queue lengths included in the queuing and blocking reports, the proposed project would cause a significant impact at this intersection under the Plus Project scenarios. No discussion on this impact or corresponding mitigation measures were mentioned in the updated traffic study.

EXHIBIT E

May 14, 2020

Re: The Terraces application

Dear Chair Sturm and Planning Commissioners:

As a former Lafayette Planning Commissioner and Chair of the General Plan Advisory Committee (GPAC) that wrote the current General Plan, I want to clear up a major misconception about the approved 2002 General Plan (GP) and the APO zoning. One of the goals of the GPAC was to ensure that the zoning was consistent with the goals and policies of the GP and, if not, recommend the zoning be changed. Our GP consultant told the GPAC many times that the GP had to be taken as a whole and all the statements and wording within it. It was clear by the many statements and goals and policies in the GP that the APO zoning was inconsistent and needed to be changed. In fact, the GP is replete with references calling for the APO zoning areas to be semi-rural and to protect the natural and scenic quality of the hillsides and ridgelines. This massive fourteen two and three building proposed project, which is a project only suited for urban areas, and is on a City protected ridgeline, violates almost every related goal and policy statement in the GP. For example, the General Plan calls for all multi-family development be in the Downtown. I would ask the Commissioners does this parcel look like the Downtown to you? The GP calls for any development on hillsides and ridgelines to be substantially concealed and to appear essentially undeveloped. I refer you to some additional GP references attached. Although it took a number of years, ultimately, the City eliminated all the APO zones in order to be consistent with the GP.

It should be noted that if any APO zoning is applied to the Terraces parcel, that zoning is inconsistent with both the approved 2002 General Plan, and the amended 2015 General Plan including the goals, policies and statements therein. Can you imagine the terrible precedent this would set?

A brief background on the 22-acre parcel on which The Terraces project is proposed, which has a more circuitous history than the other APO zoned properties in the City. The 15 member GPAC had unanimously recommended a low-density residential zoning for the property. In 2002, the City Council, on a split vote, asked that this parcel be further studied and called for a Specific Plan be done before finalizing the rezoning for the property. After several years elapsed, the City Council determined that a Specific Plan was too expensive and instead approved an Opportunities and Constraints Study (Study) be done. This Study found that the maximum number of housing units that could be built on the property was 14 units. In 2015, in order to approve an alternative 44-unit housing project, the City Council rezoned the property to R-20 and amended the GP, as the R-20 zoning was inconsistent with the 2002 approved GP, which called for low density residential. When these changes were challenged by the community, the State Appellate Court directed the City to bring the zoning for the property into compliance with the GP. The City did this in 2018, zoning the property R-65, or 14 housing units in total. The 14 housing units was consistent with the Opportunities and Constraints Study referenced above and called for in the 2002 General Plan.

In summary, the APO zoning is inconsistent with both the original and amended general plans including the goals, policies and other statements. And, under the Housing and Accountability Act (HAA), inconsistency with the General Plan is one of several bases for denying a project. Another basis is a significant adverse impact that cannot be mitigated, and this project has multiple significant adverse impacts that cannot be mitigated. It appears the City has a strong defensible position under the HAA to deny the project. As City staff has indicated, you could make the findings to deny the project, except for

the HAA. Now you can do both, make the findings to deny the project, and deny the project. I (and a large portion of the Lafayette community) urge you to do the right thing and deny this project.

Guy Atwood

47-year Lafayette resident, now living at 990 Kimberly Circle in Pleasant Hill CA