SHUTE, MIHALY
& WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: 415 552-7272 F: 415 552-5816
www.smwlaw.com

GABRIEL M.B. ROSS
Attorney
ross@smwlaw.com

August 30, 2011

Geoffrey Grote
City Administrator
City of Piedmont
120 Vista Avenue
Piedmont, CA 94611

Re: Final Environmental Impact Report for Moraga Canyon Sports Fields Project, SCH #2009112054

Dear Mr. Grote:

I am writing on behalf of the Friends of Moraga Canyon to express our deep concern over the environmental review of the proposed Moraga Canyon Sports Field Project ("Project"). The environmental review has been flawed from the beginning and we urge the City to reconsider its approach. It has resulted in an environmental impact report that violates the minimum standards of adequacy under the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq., and the CEQA Guidelines, California Code of Regulations, title 14, § 15000 et seq.

The City has opted to certify the environmental impact report for the Project without actually approving the Project. This procedure is not legally barred, but has contributed to the great confusion surrounding this Project. As detailed below, the actual features of the Project changed frequently before and after certification of the EIR. This has the result of obscuring the nature of the Project itself—the public at large now has no idea what, precisely, the City will actually consider for approval. The City's willingness to entertain Project changes after certification of the EIR reveals a certain disregard for CEQA—if the Project analyzed in the EIR can be set aside so easily, then we must question how seriously the City took the EIR process in the first place.

The shifting Project description also highlights a more fundamental problem with this Project: the unclear, but certainly problematic, relationship between the City and the Project sponsor. This is a plan for the improvement of public land, but its details (such as

they are) have been developed by a private group, answering to private interests. The Project sponsors' aims are certainly public-minded, but they, like anyone else have their own preferences about how this Project should go, and their intimate relationship with the planning and environmental review processes has led to serious errors. The public's difficulty in keeping track of the Project description is largely due to the way the Project sponsors revise it seemingly on the fly. Moreover, as described below, the sponsor's desire to build this Project on the specified site has narrowed the City's view of alternatives to the Project and led to a wholly inadequate analysis.

We have recently been informed that the City is now considering whether to prepare a supplemental EIR ("SEIR") for the Project. Under CEQA, when a Project's situation has changed since the lead agency certified the original EIR, and that change gives rise to new or more significant environmental impacts, the responsible agency should prepare a subsequent EIR. CEQA Guidelines §§ 15096(e); 15162(a), (c). The changed situation may consist of "substantial changes" in the project or "[n]ew information of substantial importance." *Id.*; *see also* Pub. Resources Code § 21166; *Mira Monte Homeowners Ass'n v. County of Ventura* (1985) 165 Cal. App. 3d 357, 363-66; *Eller Media Co. v. Cmty Redevelopment Agency* (2003) 108 Cal. App. 4th 25, 39-40. As discussed below, the Project has encountered both of these changes, thus requiring an SEIR. Moreover, an SEIR would provide an opportunity to correct many other flaws in the EIR, which presently render the document inadequate to legally support Project approval.

We had hoped that the City would provide a concrete, final project description in time for us to provide comments on the EIR, but submit these comments now, in the hope that the City will seize the opportunity provided by an SEIR. *See Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1201 (citing Pub. Res. Code § 21177(b)) ("[I]f a public hearing is conducted on project approval, then new environmental objections could be made until close of this hearing."); Guidelines §15202(b); *Federation of Hillside and Canyon Associations v. City of Los Angeles*, (2000) 83 Cal.App.4th 1252, 1263.

I. The EIR's Description of the Project is Fatally Flawed, Because the Project Has Changed Throughout the Environmental Review Process.

As we have noted in the past, the actual features and design of the Project are completely opaque. In the Draft EIR, the Project included a pedestrian bridge over Moraga Avenue, no sidewalk, and two fields and 40 parking spaces at Blair Park. Then, in January, the Project presented to the Recreating Commission included a pedestrian-activated traffic signal in place of the pedestrian bridge, 60 parking spaces and a single

field at Blair Park, a revised access scheme for the Blair Park site, and new park facilities, including a climbing wall, a par course, a dog walk and a tot lot. In February, before the Planning Commission, the Project added roundabouts at some Moraga Avenue intersections. Later, around the time of the Final EIR, the second field at Blair Park reappeared, which required dropping the other park facilities.

At the March 22 City Council meeting, a crosswalk had appeared, in addition to the pedestrian-activated signal, the second field was again deleted from the plan in favor of a "glade" and a dog walk, even as the number of parking spaces shrunk to 40 and the access plan was again altered. At the same time, it was proposed that the Project would be completed on phases. The status of the roundabouts was left entirely unclear. Most recently, we have learned from City officials that the roundabouts are in fact a part of the Project. But there is no word on where the rest of the project stands—at this moment, there is no way for the public to know how many fields or parking spaces are proposed, what type of crossing well get people across Moraga Avenue from field to field, or what else might be proposed for Blair Park.

This is, quite simply, unacceptable. The City has progressed through this environmental review process with apparently no idea of what the Project actually looks like. Or, if the City has such an idea, it has chosen not share the details with the public.

The constantly changing project description, moreover, undermines the EIR's legal adequacy. "[A]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 199 (emphasis added). The project description here, of course, is anything but stable. The most recent iteration of the Project is so distant from the one analyzed in the EIR that the document hardly seems to be looking at the same development. To provide just one example, the proposed roundabouts will entirely alter the traffic and hazards analysis, most likely for the worse. Such facilities are wholly inappropriate for a high-speed roadway like Moraga Avenue, and are likely to have significant traffic safety impacts: drivers trying to enter them coming downhill will be making a sharp turn at high speed, and will be danger of either running off the road into the embankments on the north side or drive over the "mountable curb" while hitting the bushes and tree in the roundabout.

In any event, this Project cannot be approved until there is a clear description of all of its features and an EIR that thoroughly analyzes the impacts of those features. We have seen neither yet. These post-certification changes plainly warrant an SEIR. CEQA Guidelines 15162(a)(2).

In addition, several aspects of the Project—features that appear to be relatively stable across all versions-- remain inadequately described. For example, the DEIR identifies a crosswalk across Moraga Avenue as a mitigation measure (DEIR page 257), but never explains where this crosswalk would be placed. As pointed in out the attached letter from traffic engineer Tom Brohard (Attachment 1), thorough description of this facility is necessary to evaluation of its safety effects. Without such information it is impossible to evaluate the efficacy or feasibility of this measure. Similarly, the EIR asserts that a pedestrian walkway can be developed on the site to allow public access through the site at all times, but the actual location of such a sidewalk is not possible to evaluate in the plans available to date.

Other necessary aspects of the Project are not addressed at all. Twenty-five sewer laterals presently cross Blair Park, running from the houses on the ridge above the park to the main in Moraga Avenue. A 2-inch water main and storm drains and water lines also traverse the park. (Comment A-4; DEIR at p. 31). Construction of the Project will disturb these utilities, requiring their relocation or replacement. This work is a foreseeable aspect of the Project. It therefore must be described and its environmental consequences analyzed. Without such analysis, the EIR will remain legally inadequate.

II. The EIR's Analysis of Alternatives to the Project is Profoundly Flawed.

Every EIR must describe a range of alternatives to the proposed project and its location that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. Pub. Res. Code § 21100(b)(4); CEQA Guidelines § 15126(d). A proper analysis of alternatives is essential for the City to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code§ 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45. As stated in *Laurel Heights Improvement Association v. Regents of University of California*, "[w]ithout meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the CEQA process. . . . [Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the consequences of action by their public officials." 47 Cal. 3d 376, 404 (1988). The DEIR's discussion of alternatives here fails to live up to these standards.

A. The EIR Fails to Consider a Reasonable Range of Alternatives, Because It Relies on Excessively Narrow Project Objectives.

The primary flaw in the DEIR's alternatives analysis is its failure to identify and consider a reasonable range of alternatives that reduce project impacts, as CEQA requires. Such a cursory treatment of alternatives is contrary to CEQA's central mandate that public agencies not approve projects if there are feasible alternatives that would substantially lessen the project's environmental impacts. *Berkeley Keep Jets* 91 Cal.App.4th at 1354; Pub. Res. Code § 21002. The principal function of alternatives analysis under CEQA is to evaluate alternatives that would avoid some or all of the environmental impacts associated with the proposed project. Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126.6(a); *Citizens for Quality* Growth, 198 Cal. App. 3d at 443-45.

The EIR limits its alternatives to the statutorily mandated No Project Alternative, an alternative that specifies a natural-fiber turf instead of the project's artificial fiber turf (but no other changes), and a reduced-project that is limited solely to the elimination of the smaller field on Blair Park. None of the alternatives would substantially reduce significant impacts identified in the DEIR of night lighting, visual quality, traffic hazards, health risks, general plan non-compliance, loss of oak trees, and noise. The turf alternative is better seen as not an alternative at all, but rather a mitigation measure for the health and water quality impacts of synthetic fields. The reduced project alternative fails to address any of the impacts of the Coaches Field project component (most notably, it leaves the Coaches Field night lighting in place, with all of its impacts). An EIR that fails to consider any alternative that actually reduces the project's significant impacts, is, as a matter of law, inadequate. *See* CEQA Guidelines § 15126.6(c); *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal .3d 553, 566.

B. The EIR Ignores or Dismisses Many Potential Alternatives,

In contrast to the EIR's meager range, the public has proposed several alternatives that could actually reduce or avoid several of the proposed Project's environmental impacts. These include the following:

- Relocation of the City's Corporation Yard to Blair Park and expansion of Coaches Field,
- Use or Development of Merritt College or Mountain View Cemetery

- Reconfiguration of the Blair Park component to reduce grading and access hazards, increase non-sports-field recreation areas and reduce non-compliances with the City General Plan, along with elimination of night lighting at Coaches Field
- Developing artificial turf fields (with or without) lighting at Coaches Field and leaving Blair Park as open space.
- Developing both Blair Park and Coaches Field as proposed, but leaving Coaches Field unlit.
- Enlarge Hampton Field by removing tennis courts

Despite the fact that virtually all of these alternatives were identified prior to release of the DEIR or during the discussion of it, none were evaluated in it. Several of them are dismissed in the Final EIR, but the document provides insufficient grounds for its failure to consider them.

The EIR provides no explanation at all for its failure to consider the Hampton Field alternative. At the same time, it claims that the City's corporation yard "may" not be large enough to accommodate playfields. FEIR at p. 51. This vague assertion is plainly insufficient to dismiss this alternative as infeasible. Initially, the EIR only inadequately explains how much playfield capacity is actually needed. The Final EIR includes some description of the number of "field hours" required by various sports, but bases these figures only on discussions with the local sports clubs. FEIR at pp. 16-19. Independent research is required, as the clubs clearly have an interest in promoting the Project, and thus in presenting the most dire picture of shortages. In fact, these figures are instantly suspect, as they, in the EIR's own summary, claim that there is presently a shortage of 700 field hours. *Id.* It is unclear how this is calculated, unless the leagues are full of athletes who don't actually play their sports. Without evidence of the actual level of demand for these facilities, it is impossible to evaluate the document's assertions that certain objectives cannot meet that demand.

Moreover, the fact that an alternative would achieve some but not all of the objectives is not a sufficient basis for rejecting that proposal. CEQA does not provide that all of the applicant's objectives must be met. Instead it specifies that the alternatives analysis describe a "a reasonable range of alternatives…which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects…" CEQA Guidelines §15126.6(a).

The EIR similarly rejects the possibility of using Merritt College fields by stating that the availability of those fields is "unknown, possibly precluding achievement" of the Project's objectives. FEIR at p. 51. Again, the EIR contains no actual evidence as to whether the fields could meet the City's needs or not.

It appears that no one has bothered to do more than a cursory investigation of either the corporation yard or the Merritt College alternative. Similarly, the City has ignored several other potentially feasible alternative sites for the Project. The College of Alameda, for example, has field space and is very enthusiastic about working with Piedmont. In response to an inquiry from a Piedmont resident, Athletic Director Myron Jordan asked for a proposal and said "we'll look at rental cost or a donation to the athletic department which will give you first crack at use of the field." Similarly, Laney College has three fields. Mr. John Beam, Laney Athletic Director, said, "We would love to work something out and think it would be a great partnership."

The City's failure to even consider these options, which an ordinary civilian turned up with very little work, is inexplicable. CEQA demands a thorough examination of a reasonable range of alternatives. The EIR falls far short of that standard. Moreover, outside of its statutory duties, the City must consider these, and other alternatives, as a matter of good public policy. If there is truly pressing demand in Piedmont for ballfield space, the City should be seeking out all of the possible ways to meet that demand, instead of committing itself to a single vision pressed by a specific group.

The City's refusal to look beyond the proposed Project raises the concern that the Project's sponsor's, not City staff and the elected decisionmakers, are calling the shots. For example, City Councilmember Fujioka, at a Council meeting on March 22, 2011, rejected an alternative proposal by noting that "the City can't fund it obviously and the [Project sponsor] has indicated not a willingness to fund that project and third there is an EIR process that we would need to go through and it would take at least six months if not longer - probably longer."

None of these is a legally adequate reason to reject an alternative. The City's inability to fund the alternative is irrelevant, because the City is equally unable to fund the Project as proposed. The Project's sponsor's lack of interest in alternatives is completely legally irrelevant: "The applicant's feeling about an alternative cannot substitute for the required facts and independent reasoning." *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal. App. 4th 1437, 1458; *see also id.* at n.10 ("[T]he willingness or unwillingness of a project proponent to accept an otherwise feasible alternative is not a relevant consideration."). Finally, the time required to process a new version of the Project could only render an alternative infeasible if it made the project

incapable of being accomplished. In light of the time the City has spent on the current phase of environmental review, it is difficult to conclude that a six-month delay would have such an effect.

Overall, the City appears to have confused its responsibilities and priorities for those of the Project sponsor. We urge the City to reconsider its approach, revise the environmental review of this Project accordingly, and prepare a Supplemental EIR that remedies the deep flaws of the present document.

III. An SEIR Must Be Prepared to Provide Public Review of Newly-Revealed Significant and Unavoidable Noise Impacts.

An essential purpose of CEQA is to allow the public to thoroughly review all of a project's significant impacts, to comment on these impacts, and to propose mitigation measures to reduce or avoid them. The City's approach to this EIR has denied the public the opportunity to consider at least one of the Project's significant and unavoidable impacts. The Draft EIR concluded that the Project's noise impacts would be less than significant, even though it would turn an inherently quiet passive recreation area into a noisy ballfield that would, by design, operate into the quiet hours of the evening. DEIR at p. 293.

Recognizing this obvious error and considering new evidence that was not a part of the Draft EIR, the Final EIR reconsidered:

> "the project would add lighting to Coaches Field which would extend use hours during certain times of the year, as described on page 40 of the Draft EIR, and also generate new noise at Blair Park by converting the land use from passive recreation to active recreational use. Therefore, in consideration of the permanent increase in ambient noise levels and the testimony provided by the residents regarding the existing noise levels associated with Coaches Field, the noise impact associated with the proposed project would be significant and unavoidable . . . ."

FEIR at pp. 45-46; 665-66.

The Final EIR thus included significant new information showing that a new, previously unidentified significant environmental impact would result from the Project. Pursuant to CEQA Guidelines section 15088.5(d)(1), the EIR should have been recirculated to the public prior to certification. The failure to do so renders the certification invalid.

Fortunately the strange procedures that the City has followed provide an opportunity to correct this error. The City should now prepare a Supplemental EIR in order to allow real public review of the new significant noise impact. Without such review, the Project cannot be approved.

IV. The EIR Underestimates the Project's Traffic and Parking Impacts.

As you know, Moraga Avenue faces major constraints—it is narrow and winding, with very limited sight distances to curves—and is also a major route for motorists traveling to downtown Oakland and the Grand Avenue commercial area from Piedmont, Montclair, and the Oakland Hills. Even without the Project, this is a formula for congestion and for serious safety hazards. The Project can only add to these problems. As explained in detail in the attaché letter from traffic engineer Tom Brohard (Attachment 1), the EIR has failed to meet CEQA's standards in analyzing these impacts.

Mr. Brohard's letter explains that the EIR relies on a traffic study riddled with fundamental flaws. Initially, the study relied on speed measurements that for the most part were not made in the vicinity of the Proposed Project site, but instead came from residential area, where slower speeds would be expected. This error, in turn, led the EIR to underestimate the average speed on Moraga at the Project site, which in turn led to the use of incorrect stopping distances and signal warrants.

The EIR then compounded this error by using the 85th percentile speed as the "design speed" for the roadway—the speed for which safety features must be evaluated. Instead, as Mr. Brohard points out, standard road design procedure requires the City to use a higher speed—the 95th percentile—as the design speed. Again, this error has caused the EIR to underestimate the required stopping distance at the Project. Moreover, the EIR has completely failed to take the street's substantial grade into account when calculated stopping sight distances, and has failed to consider such distances for westbound traffic making left turns into Blair Park. All of these omissions contribute to the EIR's overall failure to provide an accurate, adequate analysis of the Project's traffic impacts.

Moreover, as Mr. Brohard points out, the EIR has again failed to give the City of Oakland due consideration. The EIR committed to use Oakland traffic standards. *See* DEIR at p. 235. The EIR then ignores that commitment. Oakland standards would find a significant impact when a signal is warranted, and the Traffic Study indicates in Table 1 that a signal is warranted at the Moraga Avenue/Harbord Drive intersection pursuant to Caltrans standards, but the EIR does not find a significant impact there.

Brohard further notes that the proposed, but undescribed, crosswalk is likely to be insufficient to protect pedestrian safety. A traffic signal must be considered. He also demonstrates that other mitigation measures identified in the EIR, such as the "staggered" scheduling activities at the sports fields and increased enforcement of the speed limit on Moraga Avenue, are likely to be ineffective. Without these measures, however, the Project would have significant impacts related to serious traffic safety hazards. DEIR at p. 253. Without substantial evidence of these measures' efficacy, the City may not rely upon them to mitigate the Project's otherwise significant impacts. See CEQA Guidelines § 15126.4(a)(1). The City must either develop effective measures, redesign the Project to avoid the impacts altogether, or acknowledge that these impacts will be significant and unavoidable. Mr. Brohard proposes several other mitigation measures for the Project's significant traffic impacts, including altering the parking layout at Blair Park.

We urge you to consider Mr. Brohard's letter closely. It provides useful, clear guidance on how to improve both the environmental review of this Project and the Project itself. Brining new crowds of parents and children into Moraga Canyon will necessarily create potential hazards, and it would behoove the City to do its utmost to minimize that danger. Mr. Brohard's comments will assist the City in that effort. Without the changes he recommends, the EIR will remain inadequate. Its analysis must be thoroughly revised and an SEIR circulated to allow public review of these crucial issues.

V. The EIR's Analysis of the Project's Aesthetic Impacts Fails to Consider Public Views.

The Project would replace a wooded, undeveloped open space area along a winding road with a flat, manmade surface, complete with light poles, a parking lot, and a large retaining wall. The DEIR, however, claims that there are no "significant view locations with public access." DEIR at p. 136. This is an astonishing statement—Blair Park and Moraga Avenue each offer important public views, and each is publically accessible.

The EIR, relying on its failure to find any publically accessible view areas, ignores the impact of this wrenching aesthetic change on the people who would experience the most: the current users of Blair Park. Nowhere in the EIR's aesthetics analysis is there any discussion of park users' visual experience. The flaw clearly renders the EIR inadequate. *See Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1607 (noting importance of aesthetic impacts on park users).

Moreover, the EIR further gives short shrift to the visual impact on Moraga Avenue motorists---thousands of Piedmont and Oakland residents who will experience the Project every day. It includes only a brief discussion of this impact, and no photosimulations. Instead, the EIR claims that will be no impact because the existing vistas along Moraga Avenue "are constrained by the trees located along Blair Park frontage . . . providing only brief glimpses of features . . . between the trees as motorists wind their way up and down the canyon." This statement is so far from the actual experience of this roadway that it seems as if the authors had never actually been on Moraga Avenue. In responding to the many comments made on this lack of analysis, the Final EIR states that the "visible features [of the project] would still be restricted beyond the road by the many trees that line the Blair Park frontage." FEIR at p. 91. In other words, the EIR's analysis rest on the notion that the experience of trees and open space is no different than a view of a 25-foot concrete wall with trees planted in front of it. This analysis is implausible and legally inadequate. The EIR must be revised to include a sufficient analysis; this new information and analysis will most likely conclude that aesthetic impacts will be significant and unavoidable, adding to the reasons the City must prepare an SEIR.

VI. The EIR's Analysis of Hazards and Hazardous Materials is Dangerously Inadequate.

A. The EIR Completely Ignores The Serious Hazards That The Project Would Cause in an Emergency.

As commenters have pointed out since the beginning of this process, the proposed Project would place several hundred school children at a time in a wildland fire hazard zone and very close to the active Hayward Fault. The Project, moreover, would compromise the use of Moraga Avenue as an emergency evacuation route. The EIR completely ignores these hazards.

Approximately 41 percent of the people on-site are projected to be dropped off there or travel on foot. DEIR at p. 241. This fact has two implications. First, there may well not be enough cars on site to evacuate everyone at the ballfields. Second, if there were a fire east of the Project, in the Oakland Hills—a key scenario for any adequate hazards analysis—Moraga Avenue would certainly be severely congested: people evacuating from Blair Park and further east in the hills will jam the road heading west, while parents looking for their children will fill the eastbound side. The cars trying to pick up children or leave the site would either make u-turns or turn left out of the park parking lot to evacuate westwards on Moraga Avenue. This is in direct conflict with the Oakland emergency evacuation route. Moreover, with no continuous sidewalks on

Moraga Avenue, children leaving Blair Park will need to cross this emergency evacuation route in order to escape the site on-foot.

At the same time, the uphill traffic would impede access by emergency responders coming from the west. The conflicts between people seeking to leave a calamity and those seeking to address it were certainly major issues during the Oakland Hills fire, and are acknowledged in the City of Oakland in the Safety Element of its General Plan: "During the fire, many roads in the immediate and surrounding areas became clogged with residents trying to get out as emergency personnel were trying to get in . . . ." Attachment 2 (Safety Element of Oakland General Plan) at p. 66. The Final EIR attempts to justify this glaring omission by stating that "no comments were received during the review period from [the California Department of Forestry and Fire Protection], the department vested with the responsibility for determining the status of wildland fire hazard." FEIR at p. 433. Similarly, in regard to the local department: "the Piedmont Fire Department . . . had an opportunity to raise issues relevant to fire protection for the proposed project also at Blair Park but had no comments." *Id.* This hardly excuses the EIR's failure to consider the real hazards of the Project. It is the City's responsibility, not any other agency's to evaluate all of the Project's impacts.

No EIR would be considered adequate if it did not evaluate a potential impact on a state highway, regardless of whether Caltrans responded to the Notice of Preparation or commented on the DEIR. When a legitimate concern is identified in response to the NOP and in the DEIR, the preparers of the EIR have an affirmative responsibility to seek the information and/or expertise needed to address that issue. An agency must use its best efforts to analyze impacts. *Berkeley Keep Jets Over the Bay v. Bd. of Port Commissioners* (2001) 921 Cal. App. 4th 1344, 1370. The City has made no effort at all. The EIR will remain entirely inadequate to support Project approval until it is revised to include an actual analysis of the serious safety hazards connected with the Project.

Similarly in response to comments on the evacuation, the Final EIR simply states that " it is assumed that vehicles would be evacuating from the project areas to the west (toward Piedmont) . . . City emergency response teams would travel from Highland Avenue and east on Moraga Avenue in the opposite direction of anticipated traffic generated by the fields." FEIR at 141. This assumption ignores the problem of parents heading east to the Project site and thus provides no basis for the EIR's failure to carefully consider these impacts.

B. The EIR Acknowledges That The Project Could Cause the Release of Hazardous Materials, But Fails to Provide Any Analysis.

The current surface of Blair Park rests on deep fill. As the EIR itself acknowledges" it is not unusual for borings conducted during geotechnical investigations to uncover unforeseen, potentially hazardous materials (e.g., oily residues evident in underlying soil, asphalt)." FEIR at p. 434. At the same time, the EIR notes that the Project would have a significant impact if it has the potential to cause "the release of hazardous materials into the environment." DEIR at p. 198. Despite this possibility, there has been no hazardous materials testing was done of the borings. DEIR at p. 193.

Instead, of actually analyzing and providing mitigation for this potential impact, the EIR simply states that "standard construction practices and government regulation require the contractor to address the issue by removing such materials in accordance with regulatory requirements . . . " *Id.* This claim, whether or not true, is no substitute for the analysis that CEQA requires. *Berkeley Keep Jets*, 921 Cal. App. 4th at 1370 (agency must use best efforts to analyze impacts). Until the EIR addresses the acknowledged potential hazards, it will remain legally inadequate and cannot support approval of the Project.

VII. The EIR Provides Insufficient Analysis and Mitigation of the Project's Impacts Related to Hydrology and Water Quality.

A. The EIR Understates the Water Quality Impacts of Synthetic Turf

The Regional Water Quality Control Board and the EIR both acknowledge the lack of definitive information in regard to the impacts on health and on receiving waters from run-off from artificial turf. FEIR at pp 60, 62-64. The EIR and RWQCB identify a wide variety of potentially hazardous materials that could leach into runoff from artificial turf. The EIR claims that there is a lack of "final consensus" regarding the health risks of runoff from synthetic turf but appropriately recognizes that the uncertainty requires a determination that impact on human health is significant and unavoidable. DEIR at p. 215.

Despite this ultimately reasonable conclusion, the EIR fails to even consider the impact of this runoff on water quality. It does consider the interaction between the proposed new turf and downstream flooding (DEIR at p. 226-27), and discusses whether the runoff would violate adopted water-quality standards (*id.* at 225), but never applies its own threshold of significance by considering whether runoff from turf would "[o]therwise substantially degrade water quality." This makes no sense —it simply

defies logic that runoff could have a significant and unavoidable impact on human health but the same runoff does not harm water quality. The EIR must be revised to consider this water quality impact.

B. The EIR Provides Completely Inadequate Mitigation for the Increase in Runoff That the Project Would Cause.

The EIR acknowledges that the synthetic turf would increase runoff from Coaches Field and that this runoff could have downstream impacts. DEIR at 226-27. To mitigate this impact, however, the EIR relies on impermissibly deferred and vague measures. First, Measure HYDRO-4 states that the City will impose some unstated "compliance measures" in order to meet RWQCB requirements. DEIR at p. 227. A lead agency may choose to select its mitigation measures after project approval, but only if it identifies a clear performance standard for those measures and a list of potential measures from which to choose. *Sacramento Old City Association v. City Council* (1991) 229 Cal. App. 3d 1011. Measure HYDRO-4 does neither and is thus invalid. The DEIR further relies on two measures requiring agreements with other entities—Mountain View Cemetery and the City of Oakland. The City cannot compel either to enter such agreements. These mitigation measures are thus unenforceable, and cannot be relied upon to reduce the Project's impacts.

Moreover, the Cemetery measure, if actually implemented, would have its own environmental impacts, which must be analyzed in the EIR. CEQA Guidelines § 15126.4(a)(1)(D). A letter from the Cemetery noted that this runoff could impact its reservoir levels, as well as the reservoir's existing earth-dam integrity and capacity. It also notes concerns with the potential that particulates from runoff could clog the Cemetery's irrigation system.

In addition to the factors noted by the Cemetery, the EIR must recognize that the ponds to be used as detention facilities are likely to include jurisdictional wetlands. Any modification required to accommodate Project runoff would likely impact those wetlands and the riparian habitat they support. The EIR considers none of these impacts.

This leaves only one valid measure, installing retention facilities under Coaches Field. The Draft EIR proposed piping, but in response to a correction that increased the estimated volume of run-off more than four-fold, the Final EIR adds the possibility of an underground storage vault. This is effectively a new mitigation that has never been adequately described. Without such description, there is no evidence to support the EIR's assumption that it will be feasible and will help mitigate the runoff impact.

Ultimately, none of the EIR's proposed mitigation measures for this impact are valid. Its conclusion that the impact would be less than significant is thus unsupportable, and must be revised. This revision will necessitate the preparation of an SEIR.

VIII. The EIR Fails to Provide an Adequate Analysis of the Project's Inconsistencies With Applicable Land Use Plans.

The question of consistency between the Project and the applicable plans and ordinances plays two distinct roles in the environmental review and project approval process. First, under CEQA, a conflict between a plan or ordinance and the Project is a significant impact that must be disclosed and analyzed in the EIR. *See Pocket Protectors v. City of Sacramento* (2005) 124 Cal. App. 4th 903, 929-36. The EIR acknowledges this by establishing unequivocally that the Project would have a significant impact if it would "[c]onflict with any applicable land use plan, policy or regulation." DEIR at p. 77. The EIR's conclusions regarding these impacts, like those for any other impact, must be supported by substantial evidence.

If, as here, the EIR's analysis finds inconsistencies between the project and applicable plans or policies, the City Council may not approve the Project. "The propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Citizens of Goleta Valley*, 52 Cal. 3d at 570. The Piedmont General Plan is entirely clear on this subject: "Future decisions by the City Council must be consistent with the General Plan." Piedmont General Plan at p. 1-4.

This EIR implicates both of these aspects of planning law. First, the EIR's analysis is incomplete. It fails to recognize the Plan's policies regarding the City of Piedmont's relationship to the City of Oakland. For example, one policy calls for working collaboratively with the City of Oakland. *See* FEIR at page 35. The FEIR claims that "notifying" the City of Oakland about the project is the same as "working collaboratively." Further, the EIR fails to note that working with the City of Oakland is not just one of many policies, but a guiding principle of the General Plan: "the City will build positive and productive relationships with Oakland to achieve results that are mutually beneficial for both cities. This will include close review of development near the city limits and coordinated improvement of local services." Piedmont General Plan Framework at p. 2-17.

The EIR must be revised to carefully consider whether the review process for this Project has effectively followed these Guidelines. We suspect it has not, given the hostility with which it has been met at Oakland City Hall. Oakland officials sent at least

three comment letters noting the Draft EIR's failure to consider impacts on their City. FEIR, comment letters A5 and A6; Letter from Eric Angstadt, City of Oaklnd to Piedmont City Council, dated March 21, 2011 [attached to March 21, 2011 City Council Agenda Report. One Oakland City Councilmember has said that Oakland is likely to sue Piedmont if the Project is approved (Attachment 3 ["Piedmont sports complex plan no dream for some," San Francisco Chronicle, March 18, 2011]). This is hardly the collaborative process that the General Plan mandates.

The EIR also fails to evaluate the Project's consistency with Piedmont City Code Chapter 17, "Regulations Prescribing the Character of Construction." Under this chapter, the Planning Commission must make the following findings before approving design review for the Project"

> i. The exterior design elements are aesthetically pleasing as a whole and harmonious with existing and proposed neighborhood development. These elements include but are not limited to: height, bulk, area openings, breaks in facades, line and pitch of the roof, materials, arrangements of structures on the parcel, and concealment of mechanical and electrical equipment"
>
> ii. The design is appropriate considering its effects on neighboring properties' existing views, privacy and access to direct and indirect light; and
>
> iii: the safety of residents, pedestrians and vehicle occupants and the free flow of vehicular traffic are not adversely affected, considering the circulation pattern, parking layout and points of ingress and egress.

Piedmont Municipal Code § 17.20.9(a).

Chapter 17 is clearly "an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project," but the EIR never considered the Project's consistency with it. The EIR must be revised to include such an analysis and will remain inadequate until such analysis is performed.

These inconsistencies will, moreover, prevent the approval of the Project. It will be very difficult to conclude that the required Chapter 17 findings can be made. The Project clearly adversely affects "the safety of residents, pedestrians and vehicle occupants and the free flow of vehicular traffic," its impacts on neighbors render it plainly inappropriate, and with its cleared space and giant retaining wall, it can hardly be called "aesthetically pleasing as a whole."

At the same time, the inconsistencies identified in the EIR are an absolute bar to City Council approval. Again, the Piedmont General Plan requires that "Future decisions by the City Council must be consistent with the General Plan." The Project, by the EIR's own analysis is not consistent with the General Plan. The City Council cannot approve the Project.

For all of these reasons, we urge the City to prepare an SEIR that corrects the errors in the FEIR and looks to a clear and stable project description to ground all of its analyses.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Gabriel M.B. Ross

Cc: Dean Barbieri, Mayor
John Chiang, Vice Mayor
Garrett Keating, City Councilmember
Margaret Fujioka, City Councilmember
Jeff Wieler, City Councilmember
Mark Delventhal, Recreation Director

Attachments

Attachment 1 Letter from Tom Brohard, P.E. to Gabriel M.B. Ross, dated April 18, 2011; CV of Tom Brohard, P.E.

Attachment 2 Safety Element of Oakland General Plan

Attachment 3 "Piedmont sports complex plan no dream for some," San Francisco Chronicle, March 18, 2011]

ATTACHMENT 1

Tom Brohard and Associates

April 18, 2011

Gabriel M.B. Ross, Attorney at Law
Counsel for Friends of Moraga Canyon
C/O Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102

SUBJECT: Review of the Environmental Impact Report (EIR) for the Moraga Canyon Sports Field Project in the City of Piedmont – Traffic and Parking Issues

Dear Mr. Ross:

Tom Brohard, P.E., has reviewed Chapter 3.0 (Project Description), Chapter 4.7 (Traffic and Circulation), and other portions of the June 2010 Public Review Draft Environmental Impact Report (Draft EIR) for the Moraga Canyon Sports Fields Project in the City of Piedmont (Proposed Project) prepared by LSA. Other documents including Draft EIR Appendix C, the June 2010 Traffic Impact Analysis (Traffic Study) and its appendices prepared by LSA, as well as the November 2010 Draft Response to Comments (RTC) prepared by LSA have also been reviewed.

Further study must be undertaken to properly identify the traffic and parking impacts of the Proposed Project. As discussed throughout this letter, the Traffic Study contains major technical errors in its traffic and parking analyses of the Proposed Project. Significant traffic impacts that will occur in the City of Oakland have not been properly disclosed. Mitigation measures for the significant traffic and parking impacts identified in the Draft EIR are not supported by analyses and are defective. All feasible traffic engineering measures have not been properly considered or analyzed.

Until the various issues and concerns raised in this letter are addressed, there is "substantial evidence" that the Proposed Project will have adverse traffic and parking impacts that have not been properly disclosed, analyzed, and mitigated. Accordingly, the Public Review Draft EIR for the City of Piedmont Moraga Canyon Sports Fields Project must be revised and recirculated.

Education and Experience

Since receiving a Bachelor of Science in Engineering from Duke University in Durham, North Carolina in 1969, I have gained over 40 years of professional engineering experience. I am licensed as a Professional Civil Engineer both in California and Hawaii and as a Professional Traffic Engineer in California. I formed Tom Brohard and Associates in 2000 and now serve as the City Traffic Engineer for the City of Indio and as Consulting Transportation Engineer for the Cities of Big Bear Lake, Mission Viejo, and San Fernando. I have extensive

81905 Mountain View Lane, La Quinta, California 92253-7611
Phone (760) 398-8885 Fax (760) 398-8897
Email tbrohard@earthlink.net

experience in traffic engineering and transportation planning. During my career in both the public and private sectors, I have reviewed numerous environmental documents and traffic studies for many projects including seven EIRs in the City of Oakland. Several recent assignments are highlighted in the enclosed resume.

Traffic Issues

Based on the information provided in the Draft EIR, Traffic Study, and the Draft RTC for the City of Piedmont Moraga Canyon Sports Fields Project, my review indicates the following errors and flaws in the traffic analyses:

1) Incorrect References - References cited and used include the Manual on Uniform Traffic Control Devices (MUTCD) published in 2009 by the Federal Highway Administration (FHWA). This manual is NOT used in California. Instead, with the approval and concurrence of FHWA, California adopted a number of revisions to the MUTCD and uses the 2010 California Manual on Uniform Traffic Control Devices (CaMUTCD) published by the California Department of Transportation (Caltrans). The CaMUTCD also includes exacting procedures to establish enforceable speed limits as well as reductions in the number of vehicles needed to meet traffic signal warrants when the measured 85th percentile speed exceeds 40 MPH.

2) Incomplete Speed Data for Moraga Avenue at Proposed Project – Appendix F to the Traffic Study provides data regarding traffic speeds at various locations on Moraga Avenue. All but one of the observations for the data presented in Appendix F involves traffic speeds that were measured in the residential area to the west of the Proposed Project. Roadway characteristics are very different in the vicinity of Monte Avenue where all but one speed measurement was made. None of the data from speed measurements collected at and near Monte Avenue can be used to determine prevailing speeds in the vicinity of the Proposed Project.

   Only one set of speed measurements is included in Appendix F that can be considered to determine prevailing speeds near the Proposed Project. However, the data collected for one week in February 2004 at Maxwelton Road only includes traffic speeds in the eastbound (uphill) direction. The average speed was 32 MPH and the 85th percentile speed was 36 MPH. The material in Appendix F also includes one page from the City's 2008 Engineering and Traffic Survey Report prepared by Harris & Associates. No speed data is presented for the portion of Moraga Avenue at Blair Park, and there is no speed data for Moraga Avenue east of Pala Avenue within the entire Harris & Associates report which I have also reviewed. The only other speed data for Moraga Avenue was included in the 1986 EIR prepared by LSA for the Sports Field (now Coaches Field). This data showed an average speed on Moraga Avenue of 34 MPH in the downhill direction.

Based on the very limited speed data available and assuming a normal distribution of traffic speeds, the 85th percentile speed on Moraga Avenue at Blair Park is about 40 MPH, approximately five MPH higher than the average speed. The failure to measure current traffic speeds in both directions of travel on Moraga Avenue at Blair Park is a fatal omission in conducting a proper traffic analysis of the Proposed Project. By using lower 85th percentile and design speeds in the Traffic Study, sight and stopping distances are less than required for the prevailing speeds on Moraga Avenue. Based on existing speeds, significantly longer sight distance than reported in the EIR must be provided to provide safe operating conditions. Furthermore, the traffic signal warrant analyses are incorrectly based on higher traffic volumes than are required for the higher traffic speeds. With further study, it is likely that either traffic signals or intersection improvements at various locations will mitigate the significant traffic impacts as well as the failure to meet minimum operating Levels of Service at many of the intersections incorrectly evaluated in the EIR.

3) Incorrect Use of "85th Percentile" as "Design Speed" – The terms "85th percentile speed" and "design speed" are used interchangeably in the documents, but these are very different technical terms. The 85th percentile speed (also known as the Critical Speed) is the measured speed exceeded by 15 percent of motorists. Design speed is the speed selected to establish specific minimum geometric design elements for a particular section of a highway. According to Topic 101.1, Selection of Design Speed, the Caltrans Highway Design Manual states "...as high a design speed as feasible should be used." Table 101.2 specifies a design speed between 50 and 60 MPH for a conventional highway in a rural area with rolling terrain (such as Moraga Avenue). The design speed relates to the 95th percentile speed, the speed exceeded by only 5 percent of motorists, and is typically 10 miles per hour faster than the 85th percentile speed. The 95th percentile speed is used to determine sight distance requirements. Based on the limited speed data, the 85th percentile speed on Moraga Avenue at Blair Park is about 40 MPH and a design speed of 50 MPH should be used for sight distance.

4) Incorrect and Incomplete Sight Distance Evaluations – The Traffic Study discusses corner sight distance and provides measurements to the right and to the left at the two driveway exits proposed at Blair Park. These measurements were then compared to the required corner sight distances for 25 MPH and for 35 MPH on flat terrain. In addition to using incorrect design speeds, the Traffic Study fails to consider the five percent downgrade on Moraga Avenue. According to Index 405.1 in the Caltrans Highway Design Manual, consideration should be given to increasing distance by 20 percent on downgrades of more than three percent that are longer than one mile. To properly reflect the 5 percent downgrade on Moraga Avenue from SR13 to the site, the required stopping sight distance is 660 feet for 50 MPH, rather

than 275 feet for 25 MPH or 385 feet for 35 MPH for flat terrain as stated in the Traffic Study. The distances used in the Traffic Study are insufficient for a vehicle traveling at the prevailing speed on Moraga Avenue to react to a potential conflict in the roadway ahead and stop before striking the object.

The Traffic Study also fails to assess stopping sight distance for left turns into the two proposed driveway entrances at Blair Park. Topic 201 in the Caltrans Highway Design Manual provides graphs and tables for stopping sight distances at different design speeds for roadway grade crests, roadway grade sags, and on horizontal curves. Without a thorough evaluation, it is not possible to determine if westbound left turning motorists from Moraga Avenue into Blair Park will be able to see opposing eastbound through traffic at a design speed of 50 MPH.

Finally, it will be difficult, if not impossible, to keep the proposed landscaping adjacent to Blair Park continuously trimmed to not exceed 3.5 feet in height so it does not impede sight distance. No landscaping along the perimeter of Blair Park should be permitted that would interfere with an unobstructed line of sight measured from a point 15 feet behind the edge of pavement on the driveways exiting Blair Park to the center of the approaching traffic lanes 660 feet to the east and to the west of these points.

5) Criteria for LOS Standard Not Followed For Exit Driveways - Page 235 of the Draft EIR indicates that the City of Piedmont General Plan Circulation Element does not establish a LOS standard for the City's roadways and intersections. The Traffic Study used LOS D as the acceptable LOS for the study, the same as used by the Cities of Berkley and Oakland. However, the Traffic Study did not consider reasonable, simple, and straightforward improvements at the Proposed Project exit driveways to enable the highest delay exiting traffic movement to operate at LOS D or better.

When LSA prepared the environmental analyses in 1986 for the Moraga Sports Field (now Coaches Field), Moraga Avenue was widened at the Red Rock Road intersection and a 50 foot long eastbound left turn lane was installed. According to Page 36 of the LSA Report, the left turn lane was installed "...to avoid delays and potential accident problems." In addition, a 20 foot (minimum) wide exit lane was constructed to "...allow vehicles turning right to pass around those vehicles waiting to turn left onto Moraga Avenue."

The Traffic Study fails to consider the same minor improvements at the access driveways to and from Blair Park. When a commentor on the Draft EIR questioned this, the RTC dismissed this suggestion, indicating Moraga Avenue could not be widened. In addition, widening of the exit driveway lane to a minimum of 20' as constructed across the street would significantly reduce exiting delay and frustration, and could substantially mitigate the LOS

E projected for the worst movement through the STOP signs at the driveway exits, potentially meeting the EIR's LOS D standard. The EIR should analyze if providing two exit lanes (one for left turns and one for right turns) would mitigate the forecast LOS E condition.

6) Oakland Criteria for Significant Impacts Not Followed – As noted above, the EIR and Traffic Study used the City of Oakland's guidelines to "...provide a reasonable estimate of LOS and project impact for study area intersections." These guidelines were provided to the City of Piedmont by Oakland in response to the Notice of Preparation of the EIR. While the Draft EIR purports to use the Oakland project traffic impact significance definition, it does not in fact do so.

   Over the last 11 years, I have reviewed environmental documents prepared for seven different projects in Oakland. In each of these projects, the City of Oakland has defined a significant project traffic impact at unsignalized intersections as occurring if the Proposed Project adds ten or more vehicles to the intersection and the intersection satisfies the Caltrans peak hour volume warrant for a traffic signal after project completion. At the intersection of Moraga Avenue/Harbord Drive, the Proposed Project is forecast to add 59 trips through the intersection in the PM peak hour. Table I on Page 49 of the Traffic Study indicates this intersection satisfies the Caltrans peak hour traffic signal warrant in the Opening Year when trips to and from the Proposed Project are added. The City of Oakland standard therefore indicates that this intersection is subject to a significant impact. This significant traffic impact has not been disclosed by the EIR.

7) Other Potentially Significant Traffic Impacts Have Not Been Analyzed – When the 85th percentile speed on the major street exceeds 40 MPH, the CaMUTCD lowers the threshold vehicle volumes needed to satisfy the traffic signal warrants to 70 percent of the values used at lower speeds. Each of the traffic signal warrant sheets in Appendix H to the Traffic Study has used the higher volume thresholds associated with roadways having 85th percentile speeds of 40 MPH or less. As discussed above, the 85th percentile speed is likely to be 41 MPH or higher. If that is the case, then the Traffic Study and EIR must use the reduced signal warrants as standards of significance. There may be additional intersections with significant impacts and traffic signals or other mitigation measures will be needed. In addition to the Harbord Drive/Moraga Avenue intersection, traffic signals would also likely be warranted at Estates Drive/Moraga Avenue.

8) Traffic Impacts of Two Small Parking Lots Have Not Been Considered – The Proposed Project contains two small disconnected parking lots at Blair Park, the westerly lot with 14 parking spaces and the easterly lot with 26 parking spaces. The EIR did not analyze or discuss the traffic flows back and forth

between the two lots as parents and visitors seek an empty parking space. The two small disjointed parking lots will create additional trips on Moraga Avenue when the first parking area is full and the second is not, and vice versa. In addition to the unnecessary trips that will occur on Moraga Avenue circulating between the two small parking lots, the exit driveway for the east parking lot does not align directly opposite Maxwelton Road, creating undesirable and unnecessary conflicting turning movements when motorists from the side streets are not looking directly at each other.

One parking lot with sufficient spaces to accommodate the parking needs of the site would eliminate the unnecessary back and forth traffic on Moraga Avenue that will otherwise result. In addition, the two small parking lots with their four separate driveways within 1,100 feet double the number of vehicle conflict points on Moraga Avenue, potentially compromising traffic safety. A single entry/exit driveway to one parking area at Blair Park should be considered as a partial mitigation to the unacceptable Level of Service (E) at the exits of the two parking areas and to traffic impacts on Moraga Avenue. A single parking lot, should it be feasible, would eliminate unnecessary conflict points, and the additional trips on Moraga Avenue that will occur between the two small parking lots.

9) Level of Pedestrian Crosswalk Protection Is Uncertain – The EIR recommends "an illuminated crosswalk with an activated pedestrian signal along with advanced pedestrian crossing warning signs" to connect the Coaches Field parking lot with the northwest portion of the Blair Park site. While many commentors requested clarification of the specific device and its precise location, the RTC merely reiterates the same verbiage.

The CaMUTCD prohibits the use of in-roadway warning lights at crosswalks controlled by traffic signals or STOP signs. In-roadway warning lights provided a small level of enhancement at uncontrolled crosswalks when first introduced about ten years ago. However, as with marked crosswalks without additional protection provided by either STOP signs or traffic signals, my experience indicates pedestrians receive a false sense of security and use less caution when using in-roadway warning lights at marked crosswalks. Flashing yellow lights activated by pedestrians also create these same issues and problems. Finally, pedestrian crossing warning signs in advance of a traffic signal are prohibited by the CaMUTCD.

As Blair Park is currently designed, the intersection of Red Rock Road and Moraga Avenue does not meet any of the traffic signal warrants based on low pedestrian and vehicle volumes. One entrance/exit driveway to a single parking lot at Blair Park could align directly opposite Red Rock Road and a traffic signal for vehicles and pedestrians could be warranted based on the higher speeds and reduced thresholds identified in the CaMUTCD. The EIR

should evaluate the single access to a parking lot large enough to accommodate the parking needs at Blair Park to determine if traffic signals would be warranted at Moraga Avenue/Red Rock Road/Blair Park. In addition to facilitating safe entry from Coaches Field and Blair Park into Moraga Avenue, a traffic signal at this intersection would provide a controlled pedestrian crossing of Moraga Avenue.

To provide the appropriate level of pedestrian protection and control, a standard traffic signal is the best choice. The traffic signal would include pedestrian signals and push buttons as well as safety lighting to illuminate the intersection and the marked crosswalks. With most of the Sports Fields traffic oriented to and from the west, one crosswalk across Moraga Avenue at the east side of Red Rock Road at the traffic signal would be appropriate. Depending on prevailing speeds and the corresponding sight distance on Moraga Avenue, advance Signal Ahead signing and pavement markings together with advance flashing beacons should be considered. The EIR should analyze and evaluate this alternative.

10) Traffic Mitigation Measures Are Defective – The Traffic Mitigation Measures in the EIR are defective as follows:

a) TRAFF-1 - Scheduling of Events – The EIR indicates that the City "...shall require that practice and game activities on each field are staggered by at least 30 minutes and drop-off and pick-up operations occur throughout the hours that the fields are utilized, rather than in a single 15 minute period each hour." With children arriving 30 minutes before games begin to practice and warm up as indicated in the EIR, the staggering of only 30 minutes will guarantee that children arrive for the next games at the same time as the earlier games end. This will intensify the peak traffic rather than mitigate it. Staggering of games by at least 45 minutes is required to avoid simultaneous arrivals and departures. Further as also pointed out by one of the commentors, it is not possible for the City to legislate parent behavior in regard to drop-off and pick-up operations. Additional analyses by the EIR will likely disclose that consolidation of access together with traffic signal control will result in LOS D or better operating conditions, addressing the forecast deficiencies at LOS E of the two separate exit driveways from Blair Park that will otherwise occur.

b) TRAFF-2A – Increased Enforcement of the 25 MPH Speed Limit – While Moraga Avenue has a posted Speed Limit of 25 MPH, the 2008 Survey did not follow the procedures specified in the CaMUTCD. As indicated by one of the commentors, the Piedmont Police Department stated that the courts do not uphold speeding citations unless motorists are cited for driving at least 35 MPH. Other attempts to artificially slow traffic speeds as suggested in the EIR including parking of empty patrol cars and the use of

speed trailers will not be effective, as these measures do not reduce traffic speeds after they are removed. A proper Engineering and Traffic Survey conducted in accordance with Caltrans Operations Policy Directive Number 09-04 dated June 29, 2009 is required to determine the 85th percentile speed and then to establish an enforceable speed limit on Moraga Avenue.

c) TRAFF-3 – Illuminated Crosswalk with Pedestrian Signal – As discussed above, the description of the device is unclear and confusing. This Mitigation Measure contains provisions that are either contradictory, violate provisions of the CaMUTCD, or both. For example, flashing yellow in-roadway warning lights are not permitted at traffic signals as they conflict with the red, yellow, and green indications displayed by the traffic signal at the same time. A traffic signal on Moraga Avenue located at Red Rock Road and a single access driveway serving one parking lot at Blair Park, together with pedestrian indications and push buttons for crosswalks across the east, north, and south sides of this intersection, is the appropriate traffic control device.

d) Significant and Unavoidable Traffic Impacts in the City of Oakland – In accordance with City of Oakland significance criteria, the EIR must acknowledge that the Proposed Project creates a significant traffic impact at Moraga Avenue and Harbord Drive. The EIR has failed to examine reasonable alternative solutions to this impact. The EIR must investigate all measures to mitigate this and any other impacts that are identified.

e) Other Inadequacies – There are several additional items that must be clarified in the EIR for the Proposed Project as follows:

   i) Pathway/Walkway – The RTC indicates a 6' wide pathway/walkway will be provided along the frontage of Blair Park. The Project Description must be revised to include this pathway/sidewalk as part of the Project.

   ii) Narrowing Moraga Avenue – Throughout the process, various options were considered for modifications of Moraga Avenue including a cross section for the street presented to the Planning Commission on February 24, 2011. This cross section provides one ten foot wide travel lane in each direction as well as two-way six-foot wide bicycle facility within the roadway. While 10 foot wide through travel lanes are used in many urban environments, they are too narrow and not appropriate for roadways with high prevailing and design speeds with horizontal and vertical curves such as exist on Moraga Avenue. Additionally, Topic 1003 of the Caltrans Highway Design Manual mandates that the minimum width of a two-way bike path shall be 8 feet and that this type of facility shall be located on an exclusive right-of-way (not between

the curbs of the roadway). All striped bike lanes in the roadway shall also be one-way facilities, not two-way as depicted on the cross-section provided to the Planning Commission. If the City desires to implement "traffic calming" on Moraga Avenue, then the plan must comply with accepted traffic engineering principles such as enumerated in the Highway Design Manual.

Parking Issues

Based on the information provided in the Draft EIR, Traffic Study, and the Draft RTC for the City of Piedmont Moraga Canyon Sports Fields Project, my review indicates the following errors and flaws in the parking analyses:

1) Proposed Parking at Blair Park Is Insufficient – According to the 1986 environmental document for the Sports Field (now Coaches Park) prepared by LSA, "Parking requirements for the Moraga Sports Field have been determined from the total number of people expected on site and the average vehicle occupancy of those vehicles. An occupancy factor of 2.0 persons per car was used. Parking requirements have been calculated by dividing the total number of people on site at any given time by two. If a total of 80 attend or participate in an event, the parking requirement will be 40 spaces. If this many spaces cannot be provided, in no case should the number of people on site exceed twice the number of parking spaces provided."

   The site plan in the EIR indicates that 40 parking spaces are planned at Blair Park, with 14 in the west lot and 26 in the east lot. Based on a single Saturday observation in November 2009 during the soccer season, the EIR found 33 vehicles parked at Coaches Field within the 44 available parking spaces. Based on that limited data, the EIR forecast that 66 parking spaces would be needed for the two fields at Blair Park. Based on the number of comments on the Draft EIR, the evidence presented regarding parking shortages at Coaches Field, and my professional experience, 33 parking spaces per field will not be sufficient at Blair Park.

   Parking Generation, 4th Edition published by the Institute of Transportation Engineers (ITE) contains parking data for 12 soccer complexes. For a Saturday, ITE reports an average peak period parking demand of 59 vehicles per sports field, an 85th percentile parking demand of 66 parking spaces per sports field, and a range between 42 and 74 parked vehicles per sports field.

   As indicated in LSA's 1986 environmental document, the number of people on site at one time directly impacts the number of parking spaces that are required. Practices, with only one team on each sports field at one time, generates a need for much less parking on site. Games, with two teams on each sports field at one time plus parents and other spectators, generate a

need for much more parking on site. Clearly, scheduling of practices and games has a direct bearing on the amount of parking that is needed on site. As previously discussed, the Mitigation Measure to schedule practices and games only 30 minutes apart will intensify the parking shortage rather than mitigate it.

Assuming a condition when two games would occur at Blair Park at the same time, the ITE data indicates that 132 parking spaces would be needed, double the amount of on-site parking indicated in the EIR. If the 44 parking spaces are available at Coaches Field (no events or practices occurring) and suitable pedestrian crossing provisions of Moraga Avenue are provided as previously discussed, then 88 on-site parking spaces would be required at Blair Park.

2) Parking Mitigation Measure Is Defective – Mitigation Measure TRAFF-2B in the EIR is defective. The requirement to provide only 66 parking spaces at Blair Park will only provide half of the parking that is needed on site. Overflow from Blair Park will park on Moraga Avenue, but cannot be safely accommodated within the "marginally adequate" 26 foot to 30 foot roadway that exists. Parking requires an area 8 feet in width, and on-street parking in this area will severely encroach into 12 foot wide travel lanes, adversely impacting bicyclists who frequent Moraga Avenue. This will be a significant safety impact. Even if the roadway was wide enough, on-street parking should never be counted as suggested in the RTC to make up an on-site parking deficiency.

As discussed throughout this letter, there is "substantial evidence" that the Moraga Canyon Sports Fields Project will have adverse traffic and parking impacts that have not been properly disclosed, analyzed, and mitigated in the EIR. A Recirculated Draft EIR must be prepared to address the issues and concerns raised in this letter and those expressed by others. If you have any questions regarding these comments, please call me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard, PE
Principal

Enclosure

Tom Brohard, PE

Licenses: 1975 / Professional Engineer / California – Civil, No. 24577
1977 / Professional Engineer / California – Traffic, No. 724
2006 / Professional Engineer / Hawaii – Civil, No. 12321

Education: 1969 / BSE / Civil Engineering / Duke University

Experience: 40 Years

Memberships: 1977 / Institute of Transportation Engineers – Fellow, Life
1978 / Orange County Traffic Engineers Council - Chair 1982-1983
1981 / American Public Works Association - Member

Tom is a recognized expert in the field of traffic engineering and transportation planning. His background also includes responsibility for leading and managing the delivery of various contract services to numerous cities in Southern California.

Tom has extensive experience in providing transportation planning and traffic engineering services to public agencies. Since May 2005, he has served as Consulting City Traffic Engineer three days a week to the City of Indio. He also currently provides "on call" Traffic and Transportation Engineer services to the Cities of Big Bear Lake and San Fernando. In addition to conducting traffic engineering investigations for Los Angeles County from 1972 to 1978, he has previously served as City Traffic Engineer in the following communities:

- Bellflower ..... 1997 - 1998
- Bell Gardens ..... 1982 - 1995
- Huntington Beach ..... 1998 - 2004
- Lawndale ..... 1973 - 1978
- Los Alamitos ..... 1981 - 1982
- Oceanside ..... 1981 - 1982
- Paramount ..... 1982 - 1988
- Rancho Palos Verdes ..... 1973 - 1978
- Rolling Hills ..... 1973 - 1978, 1985 - 1993
- Rolling Hills Estates ..... 1973 - 1978, 1984 - 1991
- San Marcos 1981
- Santa Ana ..... 1978 - 1981
- Westlake Village ..... 1983 - 1994

During these assignments, Tom has supervised City staff and directed other consultants including traffic engineers and transportation planners, traffic signal and street lighting personnel, and signing, striping, and marking crews. He has secured over $5 million in grant funding for various improvements. He has managed and directed many traffic and transportation studies and projects. While serving these communities, he has personally conducted investigations of hundreds of citizen requests for various traffic control devices. Tom has also successfully presented numerous engineering reports at City Council, Planning Commission, and Traffic Commission meetings in these and other municipalities.

In his service to the City of Indio since May 2005, Tom has accomplished the following:

- Oversaw preparation and adoption of the Circulation Element Update of the General Plan including development of Year 2035 buildout traffic volumes, revised and simplified arterial roadway cross sections, and reduction in acceptable Level of Service criteria under certain constraints

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Jackson Street over I-10 as well as justifications for protected-permissive left turn phasing at I-10 on-ramps, the first such installation in Caltrans District 8 in Riverside County; oversaw preparation of plans and provided assistance during construction of a $1.5 million project to install traffic signals and widen three of four ramps at the I-10/Jackson Street Interchange under a Caltrans encroachment permit issued under the Streamlined Permit Process

- Oversaw preparation of fact sheets/design exceptions to reduce shoulder widths on Monroe Street over I-10 as well as striping plans to install left turn lanes on Monroe Street at the I-10 Interchange under a Caltrans encroachment permit

- Oversaw preparation of traffic impact analyses for Project Study Reports evaluating different alternatives for buildout improvement of the I-10/Monroe Street and the I-10/Golf Center Parkway Interchanges

- Oversaw preparation of plans, specifications, and contract documents and provided assistance during construction of 22 new traffic signal installations

- Oversaw preparation of plans and provided assistance during construction for the conversion of two traffic signals from fully protected left turn phasing to protected-permissive left turn phasing with flashing yellow arrows

- Reviewed and approved over 450 work area traffic control plans as well as signing and striping plans for all City and developer funded roadway improvement projects

- Oversaw preparation of a City wide traffic safety study of conditions at all schools

- Prepared over 350 work orders directing City forces to install, modify, and/or remove traffic signs, pavement and curb markings, and roadway striping

- Oversaw preparation of engineering and traffic surveys to establish enforceable speed limits on over 125 street segments

- Reviewed and approved traffic impact studies prepared for more than 16 major development projects

Since forming Tom Brohard and Associates in 2000, Tom has reviewed many traffic impact reports and environmental documents for various development projects. He has provided expert witness services and also prepared traffic studies for public agencies and private sector clients.

PUBLICATION DISTRIBUTION LIST

AS OF 8/22/2011

Name	Initials	Four-in-One (Lexis-Nexis)	Federal Civil Rules (Lexis-Nexis)	Planning & Zoning	CEQA Law & CEQA Guidelines	Land Use	Water & Environmental Law	Subdivision/Map Act	Harvard Blue Books (Harvard Law Review)	California Air Pollution Control Laws (Lexis Nexis)	Roser Govt. Guide (California Journal)	Making Your Case (Scalia/Garner)	California Style Manual (West Group)
		4	F	P	Q	L	W	M	B	A	R	S	X
Amy Bricker	AJB	1	-	1	1	-	-	-		-			
Andrew Schwartz	AWS	1	1	1	1	-	-	-		-			
Bill White	WJW	1	-	1	1	1	1	1		1			
Carmen Borg	CJB	-	-	1	1	-	-	-		-			
Catherine Engberg	CCE	1	-	1	1	-	-	1		-			
Clem Shute	ECS	1		1	1								
Cynthia Jawad	CJ	1	-	-		-	-	-		-			
Deborah Miller	DLM	1	-	1	1	-	-	-		-			
Ellen Garber	EJG	1	-	1	1	-	-	-			1		
Ellison Folk	EF	1	1	1	1	-	-	-		-			
Erin Chalmers	EBC	1	-	1	1	-	-	-		-			
Fran Layton	FML	1	1	1	1	1	1	1		-			
Gabriel Ross	GMBR	1	-	1	1	-	1	-	1	-			
Erica Maharg	EM	1	-	1	1	-	-	-	1	-		1	
Heather Minner	HMM	1	-	1	1	-	-	-		-			
Jackie Prange	JLP	1	1	1	1	-	-	-	1	-		1	
Juanito Meraville	JHM	1	-	-		-	-	-		-			
Laurel Impett	LLI	-	-	1	1	-	-	-		-			
Matt Zinn	MDZ	1	1	1	1	-	-	-	1	1			
Mo Ryan	MER	1	-	-	1	-	-	-	1	-			1
Nat Kane	NHK	1	-	1	1	-	-	-	1	-		1	
Osa Wolff	OLW	1	1	1	1	-	-	1		-			
Patricia Spencer	PAS	1	-	-		-	-	-		-			
Peri Perlmutter	RSP	1	-	1	1	1	-	-		-			
Peter Miljanich	PRM	1	-	1	1	-	-	-	1	-		1	
Rachel Hooper	RBH	1	-	1	1	-	-	1		-			
Richard Taylor	RST	1	-	1	1	1	1	1		-			
Sara Breckenridge	SLB	1	-	-		-	-	-		-			
Sara Clark	SAC	1	-	1	1	-	-	-	1	-		1	
Sarah Sigman	SHS	1	-	1	1	-	-	-	1	-		1	
Sean Mulligan	SPM	1	-	-		-	-	-		-			
Tamara Galanter	TSG	1	-	1	1	1	1	1		1			
Winter King	WK	1	1	1	1	-	-	-		-			
LIBRARY	LIB	2	2	1	1	1	1	1	2	1	1	1	1
TOTAL		33	9	28	29	6	6	8	11	4	2	7	2

Name	Initials	California Courts Directory (CA Court Association) N	California Elections Code E	TOTAL
Amy Bricker	AJB		-	3
Andrew Schwartz	AWS		-	4
Bill White	WJW		-	7
Carmen Borg	CJB		-	2
Catherine Engberg	CCE		1	5
Clem Shute	ECS			3
Cynthia Jawad	CJ	1	-	2
Deborah Miller	DLM		-	3
Ellen Garber	EJG		-	4
Ellison Folk	EF		-	4
Erin Chalmers	EBC		-	3
Fran Layton	FML		-	7
Gabriel Ross	GMBR		-	5
Erica Maharg	**EM**		-	5
Heather Minner	HMM		1	4
Jackie Prange	JLP		-	6
Juanito Maravilla	JHM	-	-	1
Laurel Impett	LLI		-	2
Matt Zinn	MDZ		-	6
Mo Ryan	MER	-	-	4
Nat Kane	**NHK**		-	5
Osa Wolff	OLW		-	5
Patricia Spencer	PAS	1	-	2
Perl Perlmutter	RSP		1	5
Peter Miljanich	**PRM**		-	5
Rachel Hooper	RBH		1	5
Richard Taylor	RST		1	7
Sara Breckenridge	SLB	-	-	1
Sara Clark	SAC		-	5
Sarah Sigman	SHS		-	5
Sean Mulligan	SPM	1	-	2
Tamara Galanter	TSG		-	7
Winter King	WK		-	4
LIBRARY	LIB	-	1	16
TOTAL		3	6	154

ATTACHMENT 2

4 | FIRE HAZARDS

4.1 | OVERVIEW

Characteristics Fire is a unique hazard in that it can result both from natural processes and from the intentional or accidental actions of people. There are three main types of fire hazards: wildfires, which affect open space and development on the urban fringe; structural fires, which occur in buildings; and industrial fires, which result from the ignition of hazardous materials. While fires are not entirely preventable, it is possible to create conditions that reduce the chances of fire and that facilitate efficient response in case fire breaks out. When a fire does ignite, quick response from firefighters and an adequate supply of water are essential in minimizing damage.

Key vulnerability factors General factors that affect an area's risk from fire hazards include its location, land uses, distance from fire stations, ease of accessibility by fire-fighting equipment, and adequacy of water supply. More specifically, the extent, severity and damage of fires are determined by several key factors affecting vulnerability. For the three types of fire examined in the safety element, these vulnerabilities include:

- Wildfires: steep and rugged topography, dense and unmanaged vegetation (especially woods and brush), accessibility to human activities, exposure to wind and sun,

drought conditions, and the presence of above-ground utility lines. The wild-land/urban interface is an especially hazardous area because it combines a resident population with large areas of combustible material (including structures), and is often characterized by sub-standard water supplies and a distant location from fire stations. The time of the year of high wildfire danger is from May to October, when temperatures are higher and humidity is lower. The closer to the end of this "fire season," the more critical the danger is, as vegetation becomes increasingly dry.

- Structural fires (excluding industrial buildings, which are discussed below): Especially vulnerable building and land-use types include high-rise buildings, multi-family dwellings, and high-density residential neighborhoods; places of mass assembly, such as schools, stadiums, auditoriums and shopping centers; structures constructed before current fire and building codes; institutions such as hospitals and jails that house people of limited mobility; and downtowns and other high-density commercial districts.
- Industrial fires: Especially vulnerable facilities include large industrial complexes, including seaports and airports, and businesses and other "target hazards" with substantial concentrations of highly combustible and toxic materials. Because of their nature, industrial fires are covered in the "Hazardous Materials" chapter rather than in this chapter.

Relationship to earthquakes While fires usually happen as stand-alone events, the threat of extensive fire damage is greatest following a major earthquake. Strong earthquakes can rupture gas lines and down electric lines, which can, in turn, spark fires. The severity of fires occurring under those circumstances would likely be compounded by the accompanying failure of water mains (which would hamper fire-suppression efforts) and damage to roads and overpasses (which would restrict the evacuation of people and access by emergency vehicles). In the past, strong earthquakes in the Bay Area have been followed by fires requiring the extensive involvement of professional firefighters, a relationship that is likely to continue.

The 1991 Oakland/Berkeley Hills Fire A substantial fire occurred in the North Oakland hills in 1970 that consumed 200 acres and destroyed 37 homes. Regarding this fire, the city's original safety element prophetically stated that "fortunately [a] disaster has not occurred but the potential for such a disaster is still real." In the morning of Sunday, October 20, 1991, flames broke out in a residential canyon west of Grizzly Peak Boulevard and the Caldecott Tunnel. The flames—fueled by record-high temperatures, five years of drought conditions, freeze-damaged groves of trees, and strong, hot, dry

winds—leapt quickly and easily across parcels. In little more than 15 minutes, the fire had gone out of control. It is said that during its first three hours, the fire consumed one house every 11 seconds. It took more than 1,800 fire personnel using over 400 pieces of equipment, including 20 helicopters and airplanes, to subdue the fire. The conflagration—which became known as the Oakland/Berkeley Hills firestorm, or the Tunnel fire—was not officially declared under control until 8 am on Wednesday, October 23; by then, it had become the costliest wildfire in U.S. history, causing 25 deaths, 150 injuries, the destruction of more than 3,000 homes, and approximately $1.5 billion in property damage.

This disaster led to numerous new regulations at the state and local levels. As a result of the fire, real-estate sellers statewide, for example, are now required to inform prospective buyers if a residential property lies within a zone of very high fire-hazard severity. The fire also prompted the state to create the Standardized Emergency Management System (SEMS; see chapter 2, "Emergency Management"), a framework for standardizing emergency-response procedures throughout California and facilitating the flow of information and resources among agencies. At the local level, Oakland and many neighboring jurisdictions strengthened their building and fire-prevention codes by placing new or additional regulations on the separation of buildings, ventilation criteria, roof materials, landscaping, building access, and the installation of automatic fire-extinguishing systems in public buildings.

4.2 | INSTITUTIONAL FRAMEWORK

Oakland Fire Department (OFD) OFD is the agency with primary responsibility for preventing and suppressing fires in Oakland. Besides fighting accidental fires and arson, OFD conducts fire-safety inspections and plan checks of buildings and businesses; provides fire-danger patrols and issues public warnings during times of high fire danger; conducts vegetation-management inspections; responds to hazardous-materials spills; oversees the Oakland Office of Emergency Services; issues permits for fairs, carnivals, pyrotechnic displays and other special events; offers classes to the public on first aid and cardio-pulmonary resuscitation; provides on-site training to local

businesses on basic emergency response; and teaches basic personal fire-safety and fire-prevention practices to school children.

OFD is often the first agency called in the event of medical and other emergencies. Through its emergency medical services (EMS) division, OFD has been providing round-the-clock paramedic service to Oakland residents since 2000. (Ambulance service is provided by private companies under contract with Alameda County). Every fire-station engine in Oakland has at least one paramedic on staff to provide advanced medical care; in addition, all firefighters are certified emergency medical technicians, able to provide basic care. The EMS division also distributes equipment and supplies for life-support services, and provides training and continuing education to ensure that certification and licensing requirements are current for all OFD personnel. Finally, OFD sponsors California Task Force 4 (CATF-4), a team of firefighters, doctors, paramedics, search-dog handlers, structural engineers and other specialists trained in "urban search and rescue" (US&R). The task force possesses a high level of expertise in medical, rescue and technical skills, and the specialized equipment needed to rescue victims trapped in building collapses, industrial accidents, transportation disasters and other complex situations. CATF-4 is one of eight US&R teams in California and 28 nationwide that may be mobilized within hours to respond to emergencies anywhere in the country.

Local regulations Oakland's fire-protection standards for construction are based on Title 24 of the California Code of Regulations (see above), specifically on the California Building Code (CBC) and the California Fire Code (CFC). Oakland, like many other localities in California, has amended these codes to reflect local conditions. A noteworthy local fire-related amendment to the CBC is the addition of a chapter providing for special construction requirements in fire-hazard areas, in the area damaged by the 1991 Oakland hills fire, and in areas covered by the North Oakland Hill Area Specific Plan. This amendment discusses fire-resistive walls and roofs, the separation of buildings to minimize potential fire spread, and automatic fire-extinguishing systems.

Additionally, the city has enacted a number of provisions pertaining to land subdivisions and secondary units that relate to fire safety and ingress/egress, including the width and grade of streets, minimum street-curvature radii, installation of fire hydrants and street design in hillside subdivisions. Also, the city's municipal code has chapters regulating the location, design and assignment of building numbers, and also the use and design of bedrooms that have windows or doors with security bars. Finally, various sections of

Local amendments to the California (or Uniform) Fire Code are found in chapter 15.12 of the Oakland Municipal Code. The amendment to the California Building Code regarding special fire-related construction requirements is found in section 15.04.785 of the municipal code.

Regulations pertaining to land subdivisions related to fire safety and ingress/egress are found in chapters or sections 16.16, 16.20.030, 16.24.040, 16.28.040 and 16.32 of the Oakland Municipal Code; regulations pertaining to secondary units are found in sections 17.102.360; regulations concerning building numbers are found in chapter 15.40; regulations regarding bedroom security bars are found in chapter 15.64; and the Oakland Housing Code is found in chapter 15.08.

the housing code call for the use of fire-resistant construction and the provision of smoke detectors and adequate fire-extinguishing systems or equipment. The Building Services Division of the city's Community and Economic Development Agency (CEDA) is responsible for enforcing the city's various codes when reviewing construction projects submitted for official approval.

Inter-agency cooperation In addition to general mutual-aid agreements (see the "Emergency Management" chapter), Oakland has entered into agreements with adjoining jurisdictions for cooperative response to fires. These agreements help protect Oakland residents and business situated nearer the fire stations of adjoining jurisdictions and also from fires originating outside city boundaries. Oakland has mutual-response agreements for fire protection with Alameda and Contra Costa counties, the East Bay Regional Park District (EBRPD) and the cities of Alameda, Berkeley, Emeryville, Piedmont and San Leandro. (EBRPD has its own fire department, with staff and equipment distributed among five park units, of which Tilden is the closest to Oakland.) In addition, the OFD is a member of the Hills Emergency Forum (HEF) and Diablo FireSafe Council (DFC). HEF is a coalition of government agencies and special districts that coordinate the collection and assessment of information related to fire hazards in the East Bay hills, and develops fire-safety standards and codes, incident-response and management protocols, and fuel-reduction strategies. DFC is a partnership among government and private-sector organizations working to prevention wildfires in Alameda and Contra Costa counties.

California Department of Forestry and Fire Protection (CDF) The CDF has primary responsibility for preventing and suppressing fires on more than 31 million acres of non-federal wildlands in California. The department also responds to thousands of non-wildfire emergencies annually, including car crashes, hazardous-materials spills and medical calls. Among CDF's several divisions is the Office of the State Fire Marshal (OSFM), the duties of which include regulating flammable substances and consumer products; providing statewide guidance on fire prevention in wildland areas; providing plan review and construction inspections for all state-owned and state-occupied facilities in California; and regulating intrastate hazardous-liquid pipelines. CDF, including SFM, enforces most of the state's fire-related laws (see below).

DIABLO FIRESAFE COUNCIL

State regulations pertaining to wildfire prevention are found primarily in sections 4251-4290, 4291-4299 and 4421-4446 of the California Public Resources Code. Regulations concerning structural-fire prevention are found primarily in the California Health and Safety Code, mostly under division 2, chapter 3, and under division 12, part 2.

State laws and regulations The State of California has passed numerous laws to address both wildland and structural fires. Wildfire-prevention laws regulate activities in areas deemed by the state to be "hazardous fire areas;" the maintenance of buildings and other structures in areas covered by forest, brush or other flammable materials; and the setting and burning of fires on open land. Specific issues addressed include the building of campfires, smoking, the use of fireworks, the provision of firebreaks, the design and maintenance of roofs and chimney outlets, permits for burning and blasting, and the use of spark-emitting devices. Laws aimed at preventing structural fires establish fire-safety standards for high-rise structures, public-assembly buildings, hotels and motels, and institutional facilities such as hospitals, convalescent homes, child day-care centers, foster homes, group homes, temporary shelters, and prisons and jails. Laws also address the provision of smoke detectors, portable fire extinguishers, and fire sprinklers and other automatic fire-extinguishing systems. In addition, owners must disclose to prospective buyers of real-estate property the existence of any hazards, including location in a fire-hazard severity zone.

Part 8 of Title 24 is found on the website of the California Building Standards Commission (BSC). Parts 2, 3, 4 and 9 are published by non-governmental organizations with sole publication and distribution rights, and are not yet available on the Internet; however, they may be examined free of charge at one of many "depository libraries" throughout the state (listed on the BSC's website).

California Code of Regulations (CCR) Title 24 Title 24 of the CCR ("California Building Standards Code") sets forth the fire, life-safety and other building-related regulations applicable to any structure fit for occupancy statewide for which a building permit is sought. The 2001 triennial edition of Title 24 contains 11 parts, including (with brief descriptions):

- Part 2, California Building Code: general standards for the design and construction of buildings, including provisions related to fire, life safety and structural safety.
- Part 3, California Electrical Code: electrical building standards.
- Part 4, California Mechanical Code: mechanical standards related to the design, construction, installation, and maintenance of heating, ventilating, cooling, and refrigeration systems and of heat-producing appliances.
- Part 9, California Fire Code (CFC): building standards related to fire safety that are referenced in other parts of Title 24. Topics addressed in the code include automatic sprinkler systems, fire-alarm systems, access by fire-fighting equipment, fire hydrants, explosion-hazards safety, hazardous-materials storage and use, protection for first responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises. The CFC is based on the Uniform Fire Code (UFC), a "model" code adopted through national-level consensus and which does not carry the weight of law (unlike the CFC). The CFC incorporates by reference the text of the latest published UFC, and reflects additions and deletions made to the UFC by the state.

California Environmental Quality Act (CEQA) The state's CEQA guidelines propose a wide range of environmental impacts that public agencies should consider in their evaluation of development proposals. Considerations related to fire hazards include the potential for a project to:

- expose people or structures to a significant risk of loss, injury or death involving wildland fires.

4.3 | ANALYSIS

Fire-fighting response As mentioned above, OFD is the agency with primary responsibility for preventing and suppressing fires in Oakland. OFD employs approximately 500 sworn full-time equivalents (FTE's) and 70 civilian FTE's. Combined daily staffing at all the city's fire stations totals three battalion chiefs, 32 officers, 25 fire engineers and 75 firefighters over three daily shifts. OFD operates 25 fire stations throughout the city, including one at Oakland International Airport and a fire station in the North Hills, dedicated in 1999 (see Figure 4.1). OFD's fleet of equipment includes 25 type-1 engines, four type-3 engines, seven aerial ladders, eight brush patrols, a fireboat, a heavy-rescue vehicle, two foam units, six airport rescue rigs, and four hose tenders.

The department receives in the range of 50,000-70,000 emergency and non-emergency calls a year. Of the emergency calls, approximately three-fourths are for emergency medical services, with the rest related to utilities, commercial alarms, structural fires (mostly residential), vehicle and "outside" fires, grass/wild-land fires and other emergencies. In 2002, fires caused three confirmed deaths in the city and an estimated $8.75 million in property damage. (In recent years, on average, there have been five fire-related fatalities annually.) Because fast response is critical in preventing widespread damage from fires and other emergencies, OFD aims to provide emergency service within seven minutes of notification 90 percent of the time. Generally, service can be provided in that time-frame to areas located within 1.5 miles of a fire station. Figure 4.1 shows the 1.5-mile response radii for Oakland's 25 fire stations; as shown, the vast majority of the city is covered by these response radii, with the main exceptions being

distant corners of the airport and seaport, the Bay Bridge approach, and an area in the South Hills between Skyline Boulevard and Keller Avenue. (A small area around San Pablo Avenue and 66th Street is covered by an Emeryville fire station—not shown—at Hollis and 63rd streets.) The opening of the North Hills fire station in 1999 has significantly improved the department's average response time in an area of the city that is particularly susceptible to wildfires.

Water supply Oakland obtains most of its water supply from the East Bay Municipal Utility District (EBMUD). Water flows into Oakland primarily through the Claremont tunnel from the Orinda water treatment plant, then through several aqueducts and large transmission mains into smaller distribution mains supplying the entire city; at the same time, water is stored at various reservoirs located throughout the city.

The adequacy of water supply for firefighting purposes is judged by the fire flow, or the rate of water flow needed, which is measured in gallons per minute (gpm). The desired fire flow in an area depends on the area's land use, degree of fire hazard, exposure of neighboring buildings, and the size, construction and occupancy of buildings in the area. Water supply should not be confused with water pressure, which measures the *strength* of water flow, in pounds per square inch (psi). To provide more uniform water pressure regardless of elevation, the distribution of water in Oakland is divided into pressure zones, each covering a 200-foot elevation range, approximately. Water pressure in a zone ranges from approximately 40 pounds per square inch (psi) at the top of the zone to 130 psi at the bottom of the zone. In order to maintain minimum residual pressure in the system while water is flowing, water mains must be adequately sized and fire hydrants must be adequately spaced. Most water transmission mains in Oakland are at least 20" in diameter, with a grid of smaller distribution mains serving individual blocks and hydrants. There are approximately 6,500 fire hydrants in the city, the distribution and spacing of which are generally governed by fire-code requirements. With a few exceptions, fire hydrants in Oakland are owned and maintained by EBMUD.

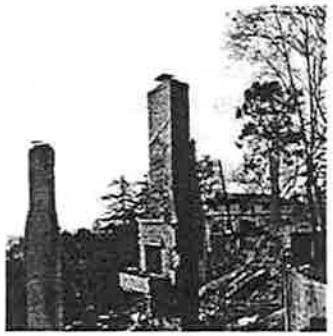
For the 1991 Oakland Hills fire, firefighters used water from many reservoirs in several pressure zones. However, the water supply from several reservoirs became exhausted after several hours, and responding fire units experienced difficulty in locating and maintaining an adequate supply of water. Illustrating the compounding effect of disasters, power failures shut down water-pumping stations that supplied reservoirs, and reservoirs were further drained as water lines at hundreds of burned-out homes burst and poured water into the streets. On a separate note, fire companies from other

jurisdictions experienced difficulty connecting to Oakland hydrants, and operations were delayed as adapters were distributed. (At the time, Oakland hydrants had three-inch outlets while most other jurisdictions use two-and-a-half-inch connections and hose couplings.)

EBMUD periodically conducts hydrant-flow tests in the city to determine the available water flow and pressure in hydrants and water mains. Contrary to misconceptions arising from the 1991 fire, water pressure is generally adequate throughout the city. However, the ability to feed water within certain zones and to certain hydrants is restricted by older water mains that are not sized for current standards or that have lost capacity due to deterioration. In addition, optimal "gridding" of water mains is not possible in the Oakland Hills due to the area's topography and street layout. Moreover, enlarging water mains to improve fireflows in low-density areas (such as the hills) is not always desirable since it could lead to poor water turnover and a resulting deterioration in water quality.

Since the 1991 firestorm, the city and EBMUD have undertaken several projects to improve the performance of the water-distribution system for purposes of fighting fires. For example, Oakland's hydrants have been retrofitted with universal hose couplings (or replaced altogether), and OFD has developed a portable water-delivery system—consisting of large-diameter hose, connections and pumps for drafting water from the bay, lakes, creeks, reservoirs and even storm-drain sewers—in the event of failure of EBMUD's water supply. At the same time, the city and EBMUD have improved fire flows in the Rockridge neighborhood, a project funded through a special assessment district of area homeowners.

Structural fires The primary factors affecting the risk of structural fire are the age and condition of the building or structure, its proximity to other structures, and the methods and materials used in its construction. Generally, older buildings are at higher risk because they were constructed prior to the adoption of current building standards; with the few exceptions of buildings that have been extensively remodeled recently, older buildings do not meet current construction codes. Higher-density development presents an increased fire risk due to the greater intensity of use and higher chance of fire spreading from one building to another. Finally, particularly susceptible to fire are wood-framed buildings, especially those with wood-shingle roofs, methods and materials that apply predominantly to small, detached single-family homes.



The City of Oakland is at higher risk for structural fire than most other jurisdictions in California because of its relatively old and dense development pattern. The geographic area of greatest concern is downtown, due to its high land-use densities and concentration of older, multi-story buildings. (This is, of course, the area from which development radiated as the city grew.) Because of its high density, downtown is the area at greatest risk of suffering harm from structural fires, in terms of both human life and property damage. On the other hand, accessibility by fire-fighting equipment is excellent, and the area has the most extensive fire-protection coverage, with seven of the city's 26 fire stations located within 1.5 miles of the corner of 14th Street and Broadway (arguably the city's development center). Elsewhere in the city, there is generally enough clearance between buildings that structural fires can usually be contained to the structure of origin. This is especially true in districts of single-family homes.

Two building-occupancy types present special fire hazards: public-assembly buildings such as schools, stadiums and auditoriums (because of the concentrations of people found at times in such buildings), and high-rise buildings. High-rise buildings pose particular access and evacuation challenges: moving firefighters and equipment up stairways lengthens response time, and chances are higher that occupants could become trapped. Current statewide fire-safety standards for high-rise structures and public-assembly buildings require built-in protection such as automatic smoke-detection, fire-detection and fire-extinguishing systems; fire-resistive methods and materials; and internal-communication systems. (With certain exceptions, standards for high-rises apply to buildings constructed after July 1, 1974 "having floors used for human occupancy located more than 75 feet above the lowest floor level having building access.") It should be noted that suppressing fires in older high-rise buildings, especially because they lack automatic fire-protection systems, could prove difficult. However, OFD has recently expanded its arsenal of fire-fighting equipment for high-rise buildings to include improved large-diameter-hose nozzles and updated its trainings and drills.

The city has in place a number of strategies to prevent structural fires. OFD's Fire Prevention Bureau reviews proposed development projects to ensure that appropriate fire-mitigation measures are taken. Projects are reviewed for such design, construction and operational features as adequate water supply and access by firefighting equipment, adequate emergency exits, sufficient clearance between structures, the use of noncombustible materials (especially for roofs and exterior walls), the provision of smoke detectors and fire extinguishers, and compliance with other building code requirements. The Fire Prevention Bureau also conducts regular inspections of

commercial and multi-dwelling buildings and residential care facilities to determine if corrective measures are necessary to protect occupants from fire. On a different note, OFD has in the last several years given away thousands of smoke detectors and replacement batteries to the public through its "fire-safe city" initiative.

Structural fires have always been, and will always be, an urban hazard in cities around the world; Oakland is no exception. However, structural fires are relatively easy to contain, certainly compared to wildfires, and especially given the city's fire-suppressing capabilities. It is unusual for a structural fire to spread to other than immediately adjacent buildings, and it is extremely unlikely that a structural fire could not be contained within the city block in which it originated (expect, perhaps, following a major earthquake). While structural fires cause localized damage in Oakland almost daily, they are highly unlikely to result in widespread damage—again, compared to wildfires. At the same time, stricter construction codes and other fire-prevention strategies have, over time, significantly reduced the aggregate structural-fire hazard.

Wildland fires Wildfires are the most severe fire hazard in Oakland, especially in the hills, above the Warren Freeway. Because the Oakland hills are a fire-dependent ecosystem, wildfires occur there every year, especially in late summer and early fall when the area's natural vegetation is dry and extremely flammable. While small fires occur every year, large fires should be anticipated every 10-20 years. The vegetation of the hills ranges from densely wooded forests to open grasslands, making virtually the entire area vulnerable to fire; the wooded areas pose risks due to the supply of fuel from trees and the possibility of crown, or tree-top, fires, while the grass- and brush-covered areas are highly flammable. Adding to the fire risk are the area's steep and rugged terrain, and the abundance of non-native vegetation, especially Monterey pine and eucalyptus, which are not fire-resistant. Most of the wildfires in the hills are minor, and OFD is usually able to control them easily. Nevertheless, aggravating circumstances can turn even small fires into disastrous events with breathtaking speed. In the case of the 1991 fire, for example, the combination of abundant dead vegetation, hot and dry weather, strong winds and, in some areas, poor accessibility and insufficient water pressure created an uncontrollable firestorm in much less than an hour.

Most of the severity of Oakland's wildfire hazard stems from the presence of residential neighborhoods amidst the large vegetated areas—a condition known as the "urban/wildland interface." Contributing to the hazard are the many wooden structures in the area and, in places, the lack of adequate evacuation routes and access routes for

emergency vehicles. Also, as shown on Figure 3.1, the hills are traversed by the Hayward fault; a significant fault movement could result in the breakage of natural-gas pipelines, setting off area-wide fires, and could also block roads and damage water lines, delaying OFD's response and compromising their fire-suppressing abilities. Finally, immediately adjacent to the city, to the northeast, are large areas of combustible material in the form of open spaces in unincorporated Contra Costa County (Orinda Canyon, primarily) and of the densely vegetated parklands owned by EBRPD: Charles Lee Tilden, Redwood and Anthony Chabot regional parks; Claremont Canyon, Robert Sibley Volcanic, Huckleberry Volcanic and Leona Heights Open Space regional preserves; and Roberts Regional Recreation Area. CDF has developed a rating of wildland fire threat for the entire state based on the combination of potential fire behavior (derived from weather, terrain and vegetative-fuel data) and expected fire frequency (derived from 50 years of fire-history data). Under this rating system, areas are assigned one of four fire-threat ratings: moderate, high, very high and extreme. While most of Oakland is rated "moderate" for fire threat, scattered parts of the Oakland Hills and most of the area adjacent to the city to the northeast (mentioned in the paragraph above) have ratings of "high" or "very high" (see Figure 4.1). Moreover, because the CDF rating does not take into account the presence of houses and other flammable structures, it most likely underestimates the fire threat in Oakland (and other urban areas).

Following the 1991 firestorm, the mayors of Oakland and Berkeley convened a series of meetings of a task force on "emergency preparedness and community restoration." The task force produced a list of nearly 100 recommended actions to mitigate wildfire hazards, covering four broad areas: emergency preparedness; communications; forestry and vegetation; and planning, zoning and design. The city Manager's office prepared a detailed response to the task force's report, describing the status or analyzing the feasibility of each recommendation. Also, the task force's report became part of a plan submitted by the city—as required of recipients of federal disaster aid—to FEMA (and also to the California OES) in 1992. The plan evaluated the natural hazards of the disaster area, reviewed past mitigation measures and recommended mitigation actions for the future. The plan identified several priority projects including implementation of a vegetation-management program, development of a portable water-supply system, implementation of a variety of fire-safety improvements at critical city-owned facilities.

In response to the 1991 firestorm, the city enacted special development requirements, described earlier in this chapter, for new construction in the wildfire-hazard areas. Also, in 1993, the city established a fire-prevention and suppression assessment district to

fund fuel-reduction, vegetation-management, fire suppression and public education programs in the Oakland Hills. The assessment district was terminated in 1997. However, mindful of the continued hazard presented by wildfires, the city council in late 2003 organized a vote among Oakland Hills dwellers for the formation of a new wildfire-prevention assessment district. The new assessment district was ratified in January 2004 after a majority of Hills voters approved its formation (see Figure 4.1 for the boundaries of the new district). The new assessment district will continue work funded by the previous district, paying for fire-safety inspections of private properties, vegetation management, roving firefighter patrols on high fire-hazard days, public education, goat grazing and other services.

OFD's vegetation-management program requires that owners of both vacant and developed lots in the area comply with fire-hazard-abatement requirements. Requirements include the removal of overgrown grass, brush and weeds; the removal of low-hanging tree branches, and of dead and dying vegetation; and street-address numbers visible from the road. Most importantly, residents must maintain firebreaks—a discontinuity of fire fuels—around buildings, structures, right-of-ways and property lines. (The purposes of a firebreak, or "defensible space," are to slow the advance of fire, give structures an opportunity to remain undamaged, and provide a clear path for firefighting personnel.) Properties found to be out of compliance with the requirements may have a tax lien placed against them. By 1999, OFD had conducted 21,000 vegetation-management inspections.

Despite the city's efforts, continued work is needed to mitigate the hazard from wildfires in the hills. Specifically, progress still needs to be made in maintaining an effective fire break along the urban-wildland interface and defensible space around residential structures, reducing the build-up of dead vegetation, re-vegetating the area with native plants resistant to fire and drought, educating area residents about wildfire mitigation, and providing adequate evacuation routes and procedures (see below). At the same time, the rebuilding of homes destroyed by the fire means that the number of people and homes in harm's way is roughly the same as it was before the fire.

Roadway standards and emergency routes Roadway standards—for such criteria as width, grades, overhead clearance and turning radii—are necessary to provide for adequate access by fire and emergency vehicles and evacuation of residents. As mentioned earlier, chapter 16.16 of the Oakland municipal code ("Design Standards") establishes regulations related to the design of streets, including alignment, width, grade, intersection, visibility, curvature radii and tangents; the chapter also includes regulations

related to the design of blocks, lots, alleys and pedestrian ways; in addition, section 16.24.040 contains lot-design standards, and chapter 16.32 covers design standards for private-access easements. Section 16.28.040 requires that in hillside subdivisions, the dedicated widths of all streets (other than arterial and collector streets) shall be at least 40 feet; and that the paved roadway widths shall be at least 30 feet if there is lot frontage on both sides the street, or 24 feet if there is lot frontage on one side of the street only. Finally, section 17.102.360 stipulates that secondary units may be permitted only if all streets connecting the lot to the nearest arterial street have a minimum pavement width of at least twenty feet.

Emergency-access and evacuation routes are a concern associated primarily with wildfires, since these tend to cover much greater areas than structural fires. Limited accessibility in the hills complicated emergency response and evacuation during the 1991 fire. Many streets in the area are narrow, winding or indirect. During the fire, many roads in the immediate and surrounding areas became clogged with residents trying to get out as emergency personnel were trying to get in; congestion was worsened by "rubberneckers," parked cars, vehicles abandoned by fleeing residents, fallen power poles and high-voltage lines, and debris falling from higher elevations. The long-range planning efforts following the 1991 fire resulted in two main recommendations related to emergency access and evacuation: to set and enforce minimum unobstructed street widths (to be implemented by street widenings and parking restrictions, accompanied by new off-street parking); and to designate and sign evacuation and emergency-response routes. Neither recommendation has been implemented to any significant extent—other than the designation of evacuation routes—and residents in the hills remain highly vulnerable to future disasters. Ingress and egress in the Oakland Hills could be compromised further, and severely, if the fire is the result of a strong earthquake (from ruptured gas mains or downed power lines), since such an earthquake would likely damage roads, bridges and overpasses.

It should be mentioned that off-street walkways provide important alternate routes for emergency evacuation, particularly in hilly areas where street access may be limited or indirect. According to the city's pedestrian master plan, there are approximately 200 walkways in the city. They are most common in older neighborhoods with hilly terrain and long street blocks; the highest concentrations of walkways are found in the neighborhoods of Upper Rockridge, Montclair, Trestle Glen, San Antonio, Fruitvale and Eastmont, and along Glen Echo Creek. The pedestrian master plan also mentions that there are at least 200 undeveloped rights-of-way that are potential sites for additional

walkways. Among the recommendations emerging after the 1991 fire were the provision of additional pathways and the provision and maintenance of pathway lighting. However, both recommendations remain largely unimplemented.

4.4 | POLICY STATEMENTS

POLICY FI-1 Maintain and enhance the city's capacity for emergency response, fire prevention and fire-fighting.

- ACTION FI-1.1: Periodically assess the need for new or relocated fire stations and other facilities, changes in staffing levels, and additional or updated supplies, equipment, technologies and in-service training classes.

  ▶ **OFD TECHNICAL SERVICES DIVISION**

- ACTION FI-1.2: Strive to meet a goal of responding to fires and other emergencies within seven minutes of notification 90 percent of the time.

  ▶ **OFD FIELD OPERATIONS DIVISION**

- ACTION FI-1.3: Continue to offer fire-prevention and fire-safety presentations and training to the public.

  ▶ **OFD FIELD OPERATIONS DIVISION**
  ▶ **OFD SUPPORT SERVICES DIVISION**
  ▶ **OFD OFFICE OF EMERGENCY SERVICES**

- ACTION FI-1.4: Continue to sponsor the formation and training of CORE teams.

  ▶ **OFD OFFICE OF EMERGENCY SERVICES**

CORE: Citizens of Oakland Respond to Emergencies

- ACTION FI-1.5: Continue to participate not only in general mutual-aid agreements but also in agreements with adjoining jurisdictions for cooperative response to fires.

  ▶ **OFD FIELD OPERATIONS DIVISION**

- ACTION FI-1.6: Continue to conduct monthly tests of the alerting and warning system's outdoor sirens, coordinating them to the extent possible with those of neighboring jurisdictions.

▶ **OFD OFFICE OF EMERGENCY SERVICES**

- ACTION FI-1.7: Along with the East Bay Municipal Utility District, review the extent to which recommendations from the district's 1994 infrastructure policy study on needed improvements to the water distribution system were implemented.

▶ **OFD FIELD OPERATIONS DIVISION**

POLICY FI-2 Continue, enhance or implement programs that seek to reduce the risk of structural fires.

- ACTION FI-2.1: Adopt and amend as needed updated versions of the California building and fire codes so that optimal fire-protection standards are used in construction and renovation projects.

▶ **CEDA BUILDING SERVICES DIVISION**
▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-2.2: Continue to enforce provisions under the local housing code requiring the use of fire-resistant construction and the provision of smoke detectors and fire-extinguishing systems.

▶ **CEDA BUILDING SERVICES DIVISION**
▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-2.3: Continue to review development proposals to ensure that they incorporate required and appropriate fire-mitigation measures, including adequate provisions for occupant evacuation and access by fire-fighting personnel and equipment.

▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-2.4: Compile a list of high-rise and high-occupancy buildings which are deemed due to their age or construction materials to be particularly susceptible to fire hazards, and determine an expeditious timeline for the fire-safety inspection of all such structures.

▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-2.5: Continue to conduct periodic fire-safety inspections of commercial, multi-family and institutional buildings.

▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-2.6: Enforce the chapter of the municipal code regulating the location and design of street-address numbers on buildings.

  ▶ **CEDA BUILDING SERVICES DIVISION**

POLICY FI-3 Prioritize the reduction of the wildfire hazard, with an emphasis on prevention.

- ACTION FI-3.1: Implement and administer the 2004 wildfire-prevention assessment district for the Oakland Hills, and carry out the programs funded by the district, including fire-safety inspections of private properties, vegetation management practices, roving firefighter patrols on high fire-hazard days, and public eduction efforts.

  ▶ **OFD SUPPORT SERVICES DIVISION**
  ▶ **OFD FIELD OPERATIONS DIVISION**
  ▶ **PWA TRANSPORTATION SERVICES DIVISION**

- ACTION FI-3.2: Consistent with the city's pedestrian master plan, develop unused pedestrian rights-of-way in the Oakland Hills as walkways to serve as additional evacuation routes, and provide and maintain lighting facilities for new and existing walkways.

  ▶ **PWA TRANSPORTATION SERVICES DIVISION**
  ▶ **PWA ENGINEERING DESIGN DIVISION**
  ▶ **PWA ELECTRICAL SERVICES DIVISION**

- ACTION FI-3.3: Continue to participate in multi-jurisdictional programs and task forces, such as the Hills Emergency Forum and Diablo FireSafe Council, that work to reduce the threat of wildfires.

  ▶ **OFD SUPPORT SERVICES DIVISION**

- ACTION FI-3.4: Along with EBMUD, review the extent to which recommendations from the utility's district's 1993 study on its preparation and response to the 1991 firestorm were implemented.

  ▶ **OFD FIELD OPERATIONS DIVISION**

4.5 | RESOURCES

Agencies consulted

- California Department of Forestry and Fire Protection (www.fire.ca.gov)
- Office of the State Fire Marshal (osfm.fire.ca.gov)
- California Building Standards Commission (www.bsc.ca.gov)
- East Bay Municipal Utility District (www.ebmud.com)
- East Bay Regional Park District Fire Department (www.ebparks.org/fire/firewx.htm)
- Oakland Fire Department (www.oaklandnet.com/oakweb/fire/index.html)
- Diablo FireSafe Council (www.diablofiresafe.org)
- The Hills Emergency Forum (www.lbl.gov/ehs/hef)

Documents consulted

- "Fire Hazard Mitigation Plan for the City of Oakland—Oakland Hills 'Tunnel Fire' Disaster Declaration;" Oakland Emergency Services Division, April 1992.
- "East Bay Hills Firestorm Response Assessment, Phase I;" East Bay Municipal Utility District, January 1992.
- "East Bay Hills Firestorm Response Assessment, Phase II;" East Bay Municipal Utility District, July 1992.
- "Water Supply Reference Course;" Oakland Fire Services Agency, revised March 1997.
- "Resource Management Plan for the Caldecott Wildlife Corridor; Alameda-Contra Costa Biodiversity Working Group;" Caldecott Corridor Committee, September 2001.
- "The Tunnel Incident, Oakland 1991—Ten Years After;" The Hills Emergency Forum, October 2001 (http://www.lbl.gov/ehs/hef/10yrsAfter.pdf).
- "Annual Report 2000;" Oakland Fire Department, undated.
- "The Oakland Hills Fire Storm: After-Action Report;" Oakland Office of the city Manager, Emergency Services Division, undated.

Other resources

- Oakland Wildfire Prevention Assessment District (www.oaklandnet.com/government/cmo/wildfireprevention.htm)
- "The Oakland/Berkeley Hills Fire" (www.firewise.org/pubs/theOaklandBerkeleyHillsFire)

Piedmont sports complex plan no dream for some

Carolyn Jones, Chronicle Staff Writer
Friday, March 18, 2011

Michael Macor / The Chronicle
Gavin Hill, a student at Pacific Boychoir Academy, kicks during a kickball game at Beach Playfield in Piedmont.

Piedmont is close to building its field of dreams, but some in Oakland are calling it a nightmare.

Oakland is threatening to file suit to stop the Moraga Canyon Sports Field, a Piedmont plan to build a soccer field, parking lot, snack bar, climbing wall and other amenities alongside the Oakland border.

The Piedmont City Council is scheduled Monday to make its last review of the project before a final vote April 4. The public will have a chance to sound off on the project, which has divided Piedmont residents and infuriated neighbors in Oakland.

"I'm trying to think positive about it, but I just don't see how this is a good idea," said Sandra Pohutsky, who lives in Oakland, just up Moraga Avenue from the proposed sports complex. "The safety and traffic issues have not been adequately addressed. It'll be a very dangerous situation."

The $6.5 million project, which would be funded privately, is a longtime dream for coaches, kids and parents in Piedmont, a 1.7-square-mile city with only two regulation-size soccer fields but more than 1,000 kids enrolled in soccer. For years Piedmont teams have been playing in Oakland and Alameda, but field time has become harder to obtain as those cities see their own soccer explosions.

A nonprofit composed of parents and coaches has offered to pay for the new sports complex. It would be located in Blair Park, a wooded, narrow canyon along Moraga Avenue that's the last undeveloped land in Piedmont.

"I hate to lose a natural park, but I've become convinced that this is the best viable option for Piedmont youth," said Piedmont recreation commissioner Leesy Taggart, who, along with the rest of the commission, approved the plan. "If we don't do this, we'll have to limit the number of kids who can play sports in Piedmont."

Those arguments don't hold much sway for nearby Oakland residents, who would be among those most affected by the sports complex because their homes are closest to the site. The project would bring parking and traffic headaches as well as decimate a pristine, quiet oasis in the heavily developed East Bay hills, they said. About 150 oaks, pines and other trees would be removed.

Oakland is likely to sue Piedmont over the project once a final version is approved, or at least demand a supplemental environmental review, said Oakland City Councilwoman Libby Schaaf.

"We've taken great issue with how the environmental study was done," said Schaaf, who represents nearby Montclair. "The EIR does not look at impacts in Oakland, and 10 or 12 impacts are so great they are not mitigatable."

But the impacts to Oakland residents for the Moraga sports complex will be minimal, Piedmont officials said. Traffic circles, stop lights and crosswalks are among the options Piedmont is considering to increase pedestrian safety and slow traffic on Moraga Avenue.

"I'm very supportive of whatever we can do to ease the impact on Oakland," said Piedmont Mayor Dean Barbieri, who met with about 50 Oakland residents and city officials last week. "But I am supportive of this project, which would make Blair Park usable by more people. Right now it's used by almost no one."

E-mail Carolyn Jones at carolynjones@sfchronicle.com.

*This article appeared on page **C - 1** of the San Francisco Chronicle*

not going to make much of a difference.

REPLY (13) (2) POPULARITY: 11 [Report Abuse]

3 replies

soccerdog 10:06 AM on March 20, 2011

With so many kids stuck inside playing video games all the time, I think anything that can foster a kid to get outside and play is a great thing. There are so many other untouched natural resources in that area. Just because some people don't want to play soccer, etc, doesn't mean that privilege should be taken away from others.

REPLY (12) (2) POPULARITY: 10 [Report Abuse]

rcoplan 10:36 AM on March 20, 2011

As a neighbor adjacent to the proposed field I am not apposed to some development of a sports field however the City of Piedmont has failed to accurately display how large this field will be, the site poles that were installed poorly show the actualy height of the field. Moraga Av will look like one long wall of cement not to mention the decimation of over 100 trees. Some field of dreams!

REPLY (5) (3) POPULARITY: 2 [Report Abuse]

View Comments (10)

Fond memories of The Phantom Diner

'Sons of Anarchy' hurts so good

Warriors' Mark Jackson as pastor

'Higher Ground' a believer's quest

Photos: Groovy '70s S.F. fashion

ATTACHMENT 3

Piedmont sports complex plan no dream for some

Carolyn Jones, Chronicle Staff Writer
Friday, March 18, 2011

Piedmont is close to building its field of dreams, but some in Oakland are calling it a nightmare.

Oakland is threatening to file suit to stop the Moraga Canyon Sports Field, a Piedmont plan to build a soccer field, parking lot, snack bar, climbing wall and other amenities alongside the Oakland border.

The Piedmont City Council is scheduled Monday to make its last review of the project before a final vote April 4. The public will have a chance to sound off on the project, which has divided Piedmont residents and infuriated neighbors in Oakland.

"I'm trying to think positive about it, but I just don't see how this is a good idea," said Sandra Pohutsky, who lives in Oakland, just up Moraga Avenue from the proposed sports complex. "The safety and traffic issues have not been adequately addressed. It'll be a very dangerous situation."

The $6.5 million project, which would be funded privately, is a longtime dream for coaches, kids and parents in Piedmont, a 1.7-square-mile city with only two regulation-size soccer fields but more than 1,000 kids enrolled in soccer. For years Piedmont teams have been playing in Oakland and Alameda, but field time has become harder to obtain as those cities see their own soccer explosions.

A nonprofit composed of parents and coaches has offered to pay for the new sports complex. It would be located in Blair Park, a wooded, narrow canyon along Moraga Avenue that's the last undeveloped land in Piedmont.

"I hate to lose a natural park, but I've become convinced that this is the best viable option for Piedmont youth," said Piedmont recreation commissioner Leesy Taggart, who, along with the rest of the commission, approved the plan. "If we don't do this, we'll have to limit the number of kids who can play sports in Piedmont."

Those arguments don't hold much sway for nearby Oakland residents, who would be among those most affected by the sports complex because their homes are closest to the site. The project would bring parking and traffic headaches as well as decimate a pristine, quiet oasis in the heavily developed East Bay hills, they said. About 150 oaks, pines and other trees would be removed.

Oakland is likely to sue Piedmont over the project once a final version is approved, or at least demand a supplemental environmental review, said Oakland City Councilwoman Libby Schaaf.

"We've taken great issue with how the environmental study was done," said Schaaf, who represents nearby Montclair. "The EIR does not look at impacts in Oakland, and 10 or 12 impacts are so great they are not mitigatable."

But the impacts to Oakland residents for the Moraga sports complex will be minimal, Piedmont officials said. Traffic circles, stop lights and crosswalks are among the options Piedmont is considering to increase pedestrian safety and slow traffic on Moraga Avenue.

"I'm very supportive of whatever we can do to ease the impact on Oakland," said Piedmont Mayor Dean Barbieri, who met with about 50 Oakland residents and city officials last week. "But I am supportive of this project, which would make Blair Park usable by more people. Right now it's used by almost no one."

E-mail Carolyn Jones at carolynjones@sfchronicle.com.

http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/03/18/BAL81IARQS.DTL

This article appeared on page **C - 1** of the San Francisco Chronicle