

SHUTE, MIHALY
& WEINBERGER LLP

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

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Via E-Mail and U.S. Mail

Marisa Smith
County of San Diego Planning and
Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Re: Harmony Grove Village South's Inconsistency With the General
Plan and Community Plan

Dear Ms. Smith:

This firm represents the Elfin Forest Harmony Grove Town Council in matters related to the County's consideration of the proposed Harmony Grove Village South project ("Project" or "HGVS"). I have reviewed correspondence between Ann Moore, counsel for Kovach, and David Sibbet, in the County's Planning Department, dated March 20, 2015. ("Moore letter"). This letter and an attached matrix describe why the Project applicant believes the Project is consistent with the County's General Plan and the Elfin Forest and Harmony Grove, San Dieguito Community Plan ("Community Plan"). After reviewing that letter, as well as relevant General Plan and Community Plan policies and maps, it is clear that the proposed Project is not consistent with the General Plan or Community Plan. Rather, the Project flatly contradicts numerous, fundamental Plan policies and violates the Community Plan's central purpose: to maintain the community's rural character.

Among other inconsistencies, the Project would violate the County's restrictions on expanding existing rural villages. The Project does not meet the General Plan's strict criteria for allowing village expansions, and must be disapproved on this basis alone. In addition, the Project would irrevocably alter the community's rural atmosphere by introducing urban-style development, with resulting noise, traffic, and other impacts. The Community Plan specifically foresaw that developers would want to upzone properties and build urban and suburban developments in the community, and it

explicitly restricted their ability to do so. Among other limitations, the Community Plan requires that new development utilize on-site septic systems, which helps maintain the large-lot, rural atmosphere. It also forbids the County from approving new developments that will cause urban residences to greatly outnumber rural residences in the community, thereby drowning out the all-important rural voice. The Project would clearly violate both of these policies.

Additionally, the Project fails to comply with County fire standards that require two egress routes. The County should not exempt the Project from this crucial requirement. Nor is it clear that the County may rely on CalFire to provide firefighting services to the Project, as I understand it may wish to do. CalFire is obligated by state law to make sure that its infrastructure and funding decisions do not support unsafe, sprawl development such as HGVS. Attached to this letter is a letter my firm is sending to CalFire to ask it for information on whether it may facilitate developments such as this one by providing fire services to it. See Exhibit 1.

Just four years ago, the County spent \$18 million in taxpayer dollars updating its General Plan and the Community Plan. This years-long process, which involved countless hours of community meetings, culminated in a General Plan and Community Plan that carefully selected the areas where the Harmony Grove community would grow while assiduously protecting the rural character of the remaining land. The Harmony Grove community worked hard to develop the Community Plan and has worked for years to enforce it. They were willing to accept their share of growth in the community, in the form of Harmony Grove Village. However, they made sure that the Community Plan contained enforceable restrictions that bar the County from approving other high-density, urban-style developments such as HGVS.

Now a developer is asking the County to ignore the Community Plan that the County and community worked so hard on. The County may not do this. Rather, it must uphold the clear, mandatory policies of the General Plan and Community Plan that protect the Harmony Grove community from creeping urbanization and developments such as HGVS. In short, the proposed Project is irrevocably inconsistent with the General Plan and Community Plan and the County must reject it.

I. The Project Must Comply With the County's General Plan

The State Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. As reiterated by the courts, "[u]nder state law, the propriety of virtually any local decision affecting land

use and development depends upon consistency with the applicable general plan and its elements.” *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, “[t]he consistency doctrine [is] the linchpin of California’s land use and development laws; it is the principle which infuses the concept of planned growth with the force of law.” *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (“FUTURE”) (1998) 62 Cal.App.4th 1332, 1336. See also *Leshner Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 540 (general plans and community plans act as a “constitution” for future development).

A proposed project need not present an “outright conflict” with a general plan provision to be considered inconsistent; the determining question is instead whether the project “is compatible with and will not frustrate the General Plan’s goals and policies.” *Napa Citizens for Honest Gov’t v. Napa County* (2001) 91 Cal.App.4th 342, 379. In addition, courts have invalidated project approvals that were inconsistent with fundamental, mandatory, and clear general plan policies, regardless of whether the projects were consistent with other general plan policies. *FUTURE*, 62 Cal.App.4th at 1341-42; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783.

Accordingly, courts give some deference to jurisdictions in interpreting their general plans, but do not allow jurisdictions to ignore inconsistencies with clear, mandatory general plan provisions. Nor may jurisdictions approve projects that will frustrate the general plan’s clear goals. As the state Supreme Court recently opined in an analogous context, “although land use regulations are generally entitled to deference, “judicial deference is not judicial abdication . . . There must be a reasonable basis in fact, not in fancy, to support the legislative determination.” *California Building Industry Association v. City of San Jose* (June 15, 2015), Case No. S212072.

II. The Proposed Project Is Inconsistent With General Plan Policy LU-1.4 Regarding Village Expansion.

One of the General Plan’s fundamental tenets is that it promotes compact development in existing communities that will reduce the loss of farmland and wildlife habitat, reduce greenhouse gas emissions, and maintain the rural and unique character of the County’s unincorporated communities. In order to carry out the goal of promoting compact development, the General Plan identifies a number of “villages” where it directs the majority of future growth. These villages are located in areas where there are existing communities that form the core of the village.

Consistent with its overarching goal of encouraging smart growth and discouraging sprawl development, the General Plan prohibits most “leapfrog” development that would place village densities at a distance from existing, established communities. The County may only approve such leapfrog development if the new village meets strict standards known as LEED for Neighborhood Development. See General Plan Policy LU-1.2.

Although the General Plan prohibits most leapfrog development, it does allow expansion of existing, designated villages in certain, narrow circumstances. Specifically, Land Use Policy LU-1.4 states that the County will “[p]ermit new Village Regional Category designated land uses only where contiguous with an existing or planned Village and where all of the following criteria are met:

- Potential Village development would be compatible with environmental conditions and constraints, such as topography and flooding
- Potential Village development would be accommodated by the General Plan road network
- Public facilities and services can support the expansion without a reduction of services to other County residents
- The expansion is consistent with community character, the scale, and the orderly and contiguous growth of a Village area”

Here, the proposed Project includes new village regional category designated land uses. It therefore must comply either with Policy LU-1.2 or LU-1.4. From the Moore letter, I understand that the County is proceeding under the assumption that the Project would comply with Policy LU-1.4. For the reasons described below, the Project does not comply with this policy and the County may not rely on it to approve the proposed, new HGVS Project.¹

¹ Nor would the Project meet LU-1.2’s requirement for compliance with LEED ND certification or equivalent. Among other requirements, LEED ND mandates that projects be located in “smart” locations where there are opportunities for transit use and impacts to agricultural land are minimized. Specifically, projects must be located either on an infill site or a site that is adjacent to previously developed land where the connectivity of the site and adjacent land is at least 90 intersections per square mile.

A. The Project Is Not Contiguous With Harmony Grove Village.

The applicant acknowledges that, in order for this Project to qualify as a village expansion under LU-1.4, the Project must be “contiguous” with the existing Harmony Grove Village (“HGV”). The Moore letter claims that “Webster Dictionary defines the term ‘contiguous’ to mean adjacent. The term ‘adjacent’ is defined as ‘near’ or ‘close to.’” Moore Letter at 3, fn. 1. It therefore claims that the Project is contiguous with HGV because it will be *near* it, even though the Project boundaries *will not touch* the HGV boundary.

This position is untenable. The Merriam-Webster dictionary defines “contiguous” as “being in actual contact: touching along a boundary or at a point,” or “touching or connected throughout in an unbroken sequence[e.g.] contiguous row houses.”² Likewise, the Oxford Dictionary defines it as: “Sharing a common border; touching.”³ This commonsense definition of the term “contiguous” also comports with the General Plan’s use of the term in other contexts. For example, Policy LU-6.7 states: “Require projects with open space to design contiguous open space areas that protect wildlife habitat and corridors.” Obviously, a wildlife corridor must be continuous, or contiguous, in order to be useful for wildlife. Corridors with breaks in them, or two separate corridors that are merely “near” each other, would not provide a useful corridor.

Nor would it make sense for the General Plan to allow a village “expansion” by placing a new village at a distance from existing ones. The General Plan has a separate policy that allows *new* villages: LU-1.2. There would be little need for this separate policy if LU-1.4 also allowed village “expansion” by leapfrogging over intervening, protected or rural land and placing new village densities at a distance from existing villages.

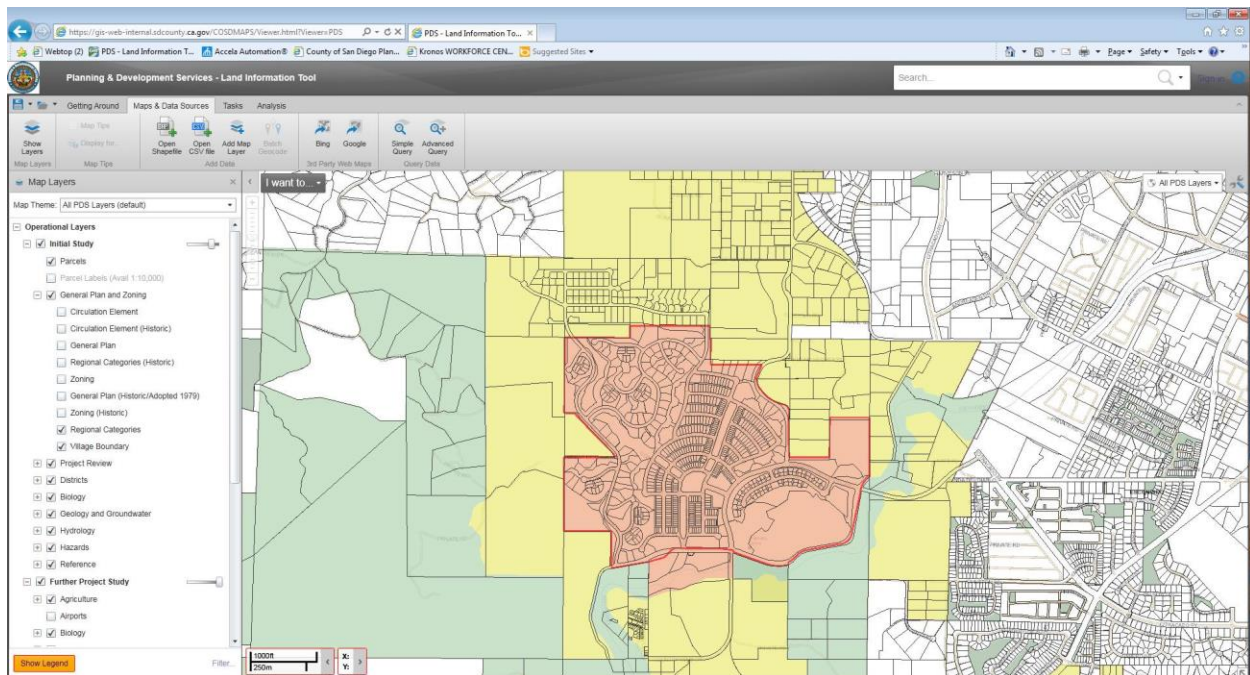
Alternatively, they may be located on a transit corridor. The Project does not meet these prerequisite requirements, not to mention myriad other requirements. See generally LEED 2009 For Neighborhood Development, available at <http://www.usgbc.org/ShowFile.aspx?DocumentID=6406>. Additionally, LU-1.2 prohibits new village densities that are located “outside established water and sewer service boundaries.” The HGVS site is located outside of an established sewer service boundary. See Exhibit 2.

² <http://www.merriam-webster.com/dictionary/contiguous>

³ http://www.oxforddictionaries.com/us/definition/american_english/contiguous

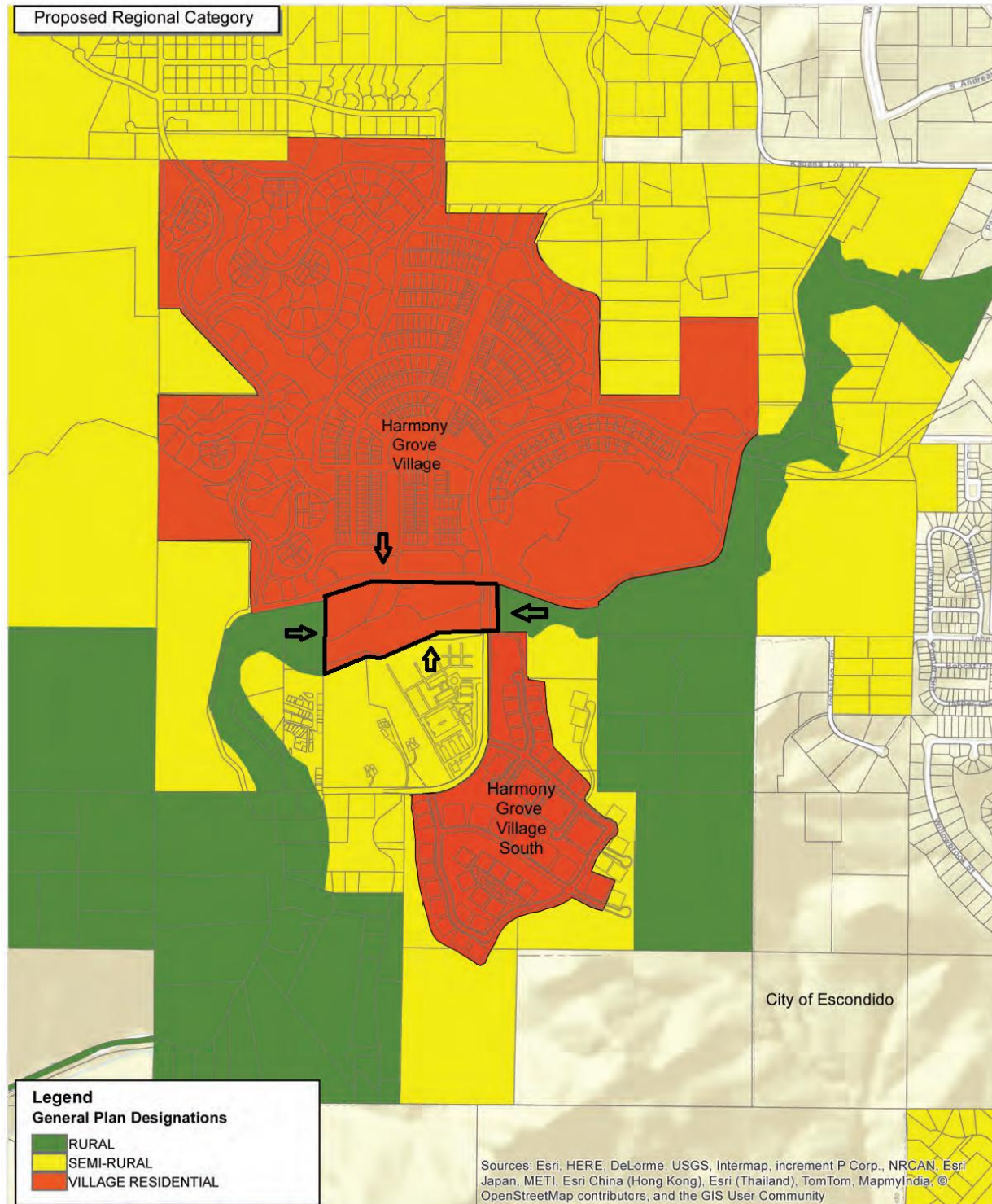
Here, the proposed Project boundary does not touch the HGV boundary and is therefore not contiguous with it. The following graphics demonstrate this fact. The first graphic shows the HGV village limit line. Although some property to the south of the village limit line is designated with village regional category land uses (see orange area to the south of the red village limit line), it is clearly outside the village limit line, and therefore outside of the existing village. The graphic also shows how this area to the south of the village limit line contains large parcels that have not been subdivided for dense, village development. This area is designated for a public park, protected creek/flood control channel, and protected riparian corridor for Escondido Creek. See Harmony Grove Specific Plan at 44. The area is slated to contain a public equestrian ranch.

Although this area is within the Harmony Grove Specific Plan, it is outside of the village limit line. Notably, the Community Plan was updated *after* the HGV Specific Plan was approved. The County therefore made a conscious decision to exclude this area from the community's designated village.



The next graphic demonstrates that the proposed HGVS is not adjacent to the HGV limit line. A miniscule portion of HGVS is across a road from the equestrian land described above that is designated with village regional categories. This area is outlined in black. Although this equestrian land is designated with village regional categories, it

will be used for a public equestrian park and a protected riparian and creek corridor. This public, protected corridor is contiguous with land to the east and west that is designated with rural regional categories (see area in green, below). Together, this greenbelt forms a complete barrier of protected, open space or rural land between HGV and the proposed HGVS. The proposed Project would leap over this protected corridor and place a completely new village at a distance from the existing village, in direct contravention of LU-1.4. Because HGVS is not contiguous with the existing village, the County may not approve the Project under the guise of expanding an existing village pursuant to LU-1.4.



The Moore letter attempts to get around the fact that HGVS's boundary does not touch the HGV limit line by emphasizing that the Project would be located approximately 300 feet from the County's public equestrian park, which is designated with a village regional category. The letter implies that the Project only needs to be contiguous with land designated with village regional categories, and need not be contiguous with the actual village limit line. This contention is incorrect. As an initial matter, even the Moore letter admits that the Project is hundreds of feet from the equestrian park and its village-designated categories. Accordingly, it is not even contiguous with these parcels.

But even if HGVS were contiguous with the equestrian park and its village-designated land, this would be irrelevant for purposes of analyzing General Plan consistency. Policy LU-1.4 requires new Village Regional Category designated land to be contiguous with an existing or planned *village*, not just contiguous with village regional category designated land. See Policy LU-1.4 (permitting village expansion "only where contiguous with an existing or planned *Village*") (emphasis added).

Here, the relevant village—HGV—is defined by a village limit line contained in the Community Plan, not by the designation of its land under the village regional category. The Community Plan states that "[t]he Harmony Grove Village Boundary, shown on Figure 3 on page 25, is a growth boundary that identifies land to which development should be directed. Areas outside this limit line are not intended to expand and should retain the original Harmony Grove rural residential and agricultural character." Community Plan at 27. As the General Plan describes, Community Plans are allowed to set village boundaries such as this which "define[] the extent of a village or rural village as a means to direct future growth and identify where development should be directed." General Plan at 10-32 (defining "Village Boundary").

Accordingly, the General Plan allows community plans to set village boundaries, and the Community Plan did that by setting the village limit line. The Community Plan explicitly states that this limit line defines the boundaries of the village and prohibits urban-style growth outside of this limit line. It is this clear boundary, and not the designation of land under the village regional category, that sets the village boundary with which any village expansion must be contiguous. Because HGVS is not contiguous with—i.e., it is not touching—the village limit line, the County may not approve the Project pursuant to LU-1.4.

B. The Project Is Not Consistent With the Community's Rural Character.

The County may not approve the Project for the additional reason that it is not consistent with the community character, scale, and orderly and contiguous growth of a Village area, as required by LU-1.4. As described more fully in the sections below, the Project is completely out-of-character with the surrounding rural, large-lot, equestrian-friendly community. Its hundreds of new urban-style residences are not in scale with the surrounding community and would overwhelm the community's rural residences and rural voice.

It also does not promote orderly and contiguous growth. HGV was designed so that more dense areas are at the center of the community and density decreases toward the edge so as to transition to the surrounding rural and semi-rural lands. See Harmony Grove Specific Plan at 21 ("As a general rule, homes and lots will be smaller near the core and grow progressively larger the more distant they are from the core area. At the perimeter . . . some individual lots will exceed two acres in size"), 22 (map showing that only equestrian/limited residential, and park/recreation/open space uses are allowed in the portion of the specific plan area to the south of the village limit line). Instead of restricting dense development to village cores and reducing density at the edge of villages, the Project would place dense development at the edge of HGV as well as at the edge of the HGVS Project.

This approach is anathema to various General, Community and Specific Plan policies that protect rural lands by requiring village development to feather densities out in order to provide transitions and buffers with surrounding land. For example, the General Plan land use map designates the Project site as semi-rural land, and designates the vast majority of the land to the east and west of the Project site with rural categories. The General Plan describes how the semi-rural land use designation "function[s] as a transition between the Village and Rural Lands categories." General Plan, Land Use Element at 3-8. Because the Project would redesignate the site with village regional categories, it would no longer serve as a transition between village and rural designations. See also Community Plan at 1 (describing how "[t]he Plan's policies require that development be comparable to, or transition with, existing development").

In sum, the proposed Project is not a logical extension of the HGV, but is really a completely new village that would be separated from HGV. The County must abide by the Community Plan's mandate to restrict urban-style development to HGV and to not allow such development outside of the existing village limit line. The Project applicant is attempting to stretch the language of LU-1.4 far beyond the breaking point, and the

County must reject this approach. The General Plan and Community Plan are the constitutions for the community's growth, and the County must uphold them by denying this Project.

III. The Project Violates Numerous Policies in the Community Plan

A. The Project Violates the Community Plan's Mandate to Retain the Area's Rural Character.

The Harmony Grove community is defined by its rural character. As the Community Plan describes, the community contains primarily single-family rural residences located on estate lots that sprawl over the hillsides. Community Plan at 16. The community's residents value open space, quiet, dark nighttime skies and low traffic volumes. *Id.* "Some of the key elements of the Harmony Grove character and values include one- and two-story single family homes on large lots; large animal facilities on residential properties; no clustered development; [and] no 'cookie-cutter' developments." *Id.* The Community Plan describes the "ideal future state" of the community as one that has "rural idylls" and where "[t]he all-important rural voice is not overwhelmed by the urban voice." *Id.* at 23. The Community Plan contains numerous goals describing these values, and numerous policies that protect them.

The existing General Plan and Community Plan, as well as the Harmony Grove Specific Plan, are the result of years of negotiation and compromise. Recognizing that they needed to accept their "fair share" of development, local residents did not fight the HGV Specific Plan when it was approved in 2007. However, the only reason they did not oppose it was because County planning staff assured them that the HGV project represented the community's fair share of dense development and that the Community Plan would restrict future expansion of urban-style housing.⁴

The Community Plan, which was updated in 2011, reflects this understanding. It contains the goal to preserve "the lifestyle of the rural resident while accommodating growth," and includes a strict village limit line around HGV. Numerous Community Plan policies reflect the commitment to limit urban densities to this village area in order to preserve the rural character of the community. For example, the Community Plan describes how the "historic community is rural equestrian and agricultural, and the HG Village will have more urban densities. The rural lifestyle must not be lost to urban

⁴ See <http://www.utsandiego.com/news/2007/feb/08/supervisors-ok-harmony-grove-village/2/?#article-copy>, attached as Exhibit 3.

sprawl.” Community Plan, Issue SPA-2.2. Accordingly, it articulates the following goal: “Preservation of the unique features of a rural lifestyle, while integrating the urban lifestyle of the HG Village.” Community Plan, Goal SPA-2.2. It also adopts the following policy: “Strictly adhere to the restrictions imposed by the Village Boundary (shown in section 1.0 of this plan).” Policy SPA-2.2.5.

Similarly, the Community Plan describes how “non-resident land speculators have purchased local undeveloped land in the hopes that General Plan Amendments allowing higher density will be adopted by the Board of Supervisors,” but that “[r]esidents will continue to work to preserve this historic 100-year-old community by implementing the Village Development Pattern that was negotiated.” Community Plan at 21. It emphasizes that “[d]evelopment of these parcels outside the proposed Harmony Grove Village Boundary (refer to Figure 3) with an urban, clustered, or suburban design threatens the continued existence of the rural residential and equestrian character of Elfin Forest/Harmony Grove.” *Id.* at 31. It also describes how the village limit line around HGV “is a growth boundary” and that “[a]reas outside this limit line are not intended to expand and should retain the original Harmony Grove rural residential and agricultural character.” *Id.* at 27.

The Community Plan also contains a policy that requires all new development to utilize septic systems on site. Policy CM-10.2.1. Because septic systems require larger lots, this policy ensures that the area will continue to have homes on large, rural lots as opposed to small, clustered urban- or suburban-style homes. Further, the Plan contains policies to preserve the rural, equestrian character of the community. For example, Policy LU-1.5.3 requires the County to “[p]rovide for lot sizes that will permit residents to keep leisure and market animals on their property.” Similarly, Goal LU-1.9 describes how the Community Plan will preserve “[a]n attractive equestrian community that encourages environmentally sensitive, responsible horse keeping.” See also Policy LU-1.9.2 (“Encourage the keeping of equestrian and market animals”); Policy CM-2.3.1 (“Restrict local public roads to two-lane, undivided, curving streets; with established speed and weight limits commensurate with residential equestrian neighborhoods.”).

The proposed Project violates the Community Plan’s overarching mandate to protect the rural character of the community. Instead of proposing new, equestrian-friendly development on large lots, the proposed Project would place more than 450 homes in dense, multi-unit clusters. It would require widening a road to more than two lanes and utilizing a wastewater treatment plant instead of septic systems, and it would not allow for on-site keeping of equestrian and market animals. Additionally, it would

severely disrupt the current balance of urban and rural homes, thereby drowning out the “all-important rural voice” that the Community Plan protects.

This is the wrong project in the wrong location. The County cannot find, as it is legally required to do, that the Project “is compatible with and will not frustrate the General Plan’s goals and policies.” *Napa Citizens for Honest Gov’t*, 91 Cal.App.4th at 379. On the contrary, the Project flatly contradicts the General Plan and Community Plan and the County must reject it.

B. The Project Violates the Community Plan’s Mandate to Ensure that Urban Residences Do Not Outnumber Rural Residences.

In addition to the Project’s overall inconsistency with the General Plan and Community Plan’s goals, the Project also conflicts with specific Community Plan policies. One of these policies is to “[e]nsure that the number of urban residences does not greatly exceed that of the rural residences in the greater unincorporated communities of Harmony Grove and Eden Valley.” Policy LU-2.2.1. This policy is fundamental to the Community Plan’s overarching goal of maintaining the rural character of the community. As described above, the Community Plan repeatedly states that the community is rural in nature, is defined by its large-lot, equestrian lifestyle, and should be preserved in that manner while only allowing dense, new development in strictly defined areas.

Policy LU-2.2.1 is also mandatory; it states that the Community Plan will “*ensure*” that urban residences do not greatly outnumber rural ones. It does not state that the Plan “should strive” to maintain this balance, or that the County “should consider” this factor when approving new development. Rather, it clearly states that the County shall ensure that rural homes are not greatly outnumbered by urban ones. This policy’s strong language and firm commitment are not accidental. When the County updated its General Plan and the Community Plan in 2011, it described how it carefully choose policy language that was clear and would provide firm commitments:

the issue of mandatory language versus permissive language has been considered carefully in preparing the General Plan Update documents. The County has avoided the use of “should” because it desires a General Plan that is clear on its intent and avoids debate during application. This approach has also been supported by a number of stakeholders and commenters on the General Plan Update who have indicated that they desire *clear and firm commitments* to certain policies and actions.

San Diego County General Plan Update EIR, p. O3-4, attached as Exhibit 4 (emphasis added).

Finally, the policy language is not vague or ambiguous, but is clear. The policy explicitly forbids the County from approving projects that will cause the number of urban residences to greatly exceed rural residences in the Harmony Grove and Eden Valley communities. The Community Plan describes how, in order to maintain this balance, the County must “strictly follow[]” the General Plan’s 2011 land use map. Community Plan at 21. If it follows this land use map by allowing build-out of HGV but not approving any additional dense development in the community, then “the final number of urban homes should approximately equal the number of rural homes in the neighboring communities and Harmony Grove should be able to keep its rural voice.” *Id.* In contrast, if the County does *not* strictly follow the 2011 land use map, then the number of urban homes will greatly exceed the number of rural ones.

Here, it is undisputed that the proposed HGVS is not consistent with the County’s 2011 land use map. Rather, HGVS proposes a General Plan Amendment, Specific Plan, and rezone that would allow 453 clustered, urban-style homes on land that would be designated under the Village Regional Category. As demonstrated below, approval of the Project would allow the number of urban homes to greatly exceed the number of rural homes, in violation of Policy LU-2.2.1.

The number of existing and allowed rural residences in Harmony Grove are as follows:⁵

Harmony Grove (existing residences):	125
Eden Valley (existing residences):	80
Remaining residences that could be developed under existing General Plan:	328 ⁶

⁵ Policy LU-2.2.1 requires that the number of urban residences not greatly exceed that of the rural residences in the greater unincorporated communities; however, it does not describe whether, in doing the math, the County should count only *existing* rural residences or should also count residences that would be allowed under the existing General Plan designations and zoning. In order to be conservative, we use the latter interpretation. If the former interpretation was used, HGVS would cause an even greater imbalance between urban and rural residences.

⁶ This includes 118 homes in the area that is currently proposed for the Valiano project and 210 homes in the area proposed for the HGVS Project.

Rural style residences in HGV: 55⁷
Total: 588

The number of urban residences are as follows:
Harmony Grove Village: 687⁸

Accordingly, under build out of the current General and Community Plans, urban homes will constitute approximately 54 percent, and rural homes 46 percent, of the residences in these communities. This balance ensures that the rural voice is not lost and reflects the carefully crafted compromise embodied in the Community Plan.

However, if the Project is approved, the number of urban homes will greatly exceed the number of rural ones. Under this scenario, 210 residences are subtracted from the “rural” side of the equation (representing the 210 rural homes that could have been built in the area proposed for HGVS). This leaves 378 rural homes. In addition, the Project’s 453 homes are added to the “urban” side of the equation, which would total 1140 urban homes. In sum, there would be 378 rural homes and 1140 urban homes. Rural homes would constitute 23 percent of the community’s residences, and urban homes would constitute 77 percent of residences. In other words, urban homes would outnumber rural ones by more than a three to one ratio, demolishing any chance of maintaining the community’s rural voice.

If urban homes greatly outnumber rural ones, the Community Plan’s careful balance will be lost. Among other impacts, approving HGVS and its urban-style homes would cause more traffic on the area’s small, 2-lane country roads. Existing residents ride horses and walk along these roads, and these activities would become far more dangerous with increased traffic. Additionally, new residents who are not accustomed to equestrian communities might not know to slow down when driving by horses so that they do not spook them. The increased traffic, in turn, could lead to pressure to widen the roads or change their status to Rural Collector roads.

New, urban residents are also more likely to complain about smell or noise from large animals in the vicinity. Additionally, urban areas contain street lights, which

⁷ HGV contains 55 larger lots around its periphery that allow on-site equestrian uses and might conceivably be considered “rural” for purposes of this analysis.

⁸ HGV allows 742 homes total. See HGV Specific Plan at 10. Subtracting 55 larger-lot, equestrian homes from this number equals 687.

diminish the dark skies that define the existing community. See Community Plan at 16 (describing how the community's residents value dark nighttime skies). Residents of urban/suburban communities also expect different levels of service and different amenities, and may lobby over time to have sidewalks, more street lights, wider roads, more commercial areas, and other services. If urban residents greatly outnumber rural ones, then these residents will have a much greater say in the way the area develops over time.

In short, approving the Project would violate the Community Plan's clear policies to maintain the rural voice and atmosphere. Courts have repeatedly overturned jurisdictions' approval of projects that are inconsistent with fundamental, mandatory and clear general plan policies such as the ones applicable here. *FUTURE*, 62 Cal.App.4th at 1341-42; *Endangered Habitats League, Inc.*, 131 Cal.App.4th at 783; *San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino* (1984) 155 Cal.App.3d 738.

The *FUTURE* case is particularly analogous here. In that case, El Dorado County's general plan restricted low density residential designations "to those lands contiguous to Community Regions and Rural Centers to provide for a transition of density into the Rural Regions." *FUTURE*, 62 Cal.App.4th at 1340. Like San Diego County's "rural village" concept, El Dorado County's Community Regions and Rural Centers were areas identified in the general plan for development of rural towns. *Id.* A developer proposed a project that would have designated low density residential property in areas that were not contiguous with—i.e., not immediately bordering—a Community Region or Rural Center. *Id.* The County argued that any such general plan inconsistency was not fatal to the project approval because the project was consistent with numerous other general plan policies and it had discretion to balance the various policies in its plan. *Id.* at 1341.

The court of appeal emphatically rejected the county's arguments. It noted that the proposed project was separated from nearby Community Regions and Rural Centers by rural residential land use designations, and therefore was not contiguous with those regions and centers. *Id.* at 1340. It also specifically disagreed with the county's argument "that inconsistency with simply one general plan policy should not be enough to scuttle a project." *Id.* The court acknowledged that projects need not be consistent with each and every general plan policy if those policies are "amorphous in nature" or not fundamental to the plan. *Id.* at 1341-42. But it found that the general plan "policy of contiguous development" is "fundamental[,] . . . mandatory and anything but amorphous." *Id.* at 1341. Accordingly, it overturned the county's finding that the project complied with the general plan.

As described above, San Diego County's policy of contiguous development for village expansions is strikingly similar to the policy of contiguous development in *FUTURE*. Like the policy at issue in *FUTURE*, the County's policy here is central to the General Plan's vision of restricting dense development to the core of villages and requiring densities to feather out to the surrounding rural areas. The policy is also expressed in mandatory language and is not amorphous. As in *FUTURE*, the proposed Project's inconsistency with this General Plan policy prevents the County from approving the Project.

C. The Project Is Inconsistent With the Community Plan's Requirement That New Development Utilize Septic Systems.

The Community Plan also protects the rural character of the community by forbidding new, dense development that would require homes to connect to a wastewater treatment plant. Policy CM-10.2.1 states: "Require all proposed new development to use septic systems with one septic system per dwelling unit." By requiring new development to have septic systems, and disallowing new treatment plants, the Community Plan ensures that new homes will be built on lots that are large enough to allow septic. See County Code § 68.341(e) (requiring that subdivisions with septic systems must allow adequate land for the system, plus reserve area). The existing HGV does contain a small treatment plant, but the HGV Specific Plan—which allowed this treatment plant—was approved before the Community Plan was updated in 2011. Accordingly, the Community Plan was drafted to allow this treatment plant to continue serving the HGV community, but to forbid new homes from hooking up to it or building their own treatment plant.

The proposed HGVS would develop more than 450 homes at densities that would not allow individual septic systems. The Project is thus flatly inconsistent with this policy. The policy also meets the *FUTURE* criteria for being fundamental, mandatory and clear. It is fundamental to maintaining the rural character of the community because it explicitly restricts small-lot, urban or suburban development, which is one of the Community Plan's core goals. It is drafted in mandatory language: "*require all* proposed new development to use septic systems . . ." It is also clear and unambiguous. There is no wiggle room for developers to claim that their project complies; either new homes will have on-site septic or they will not.

Oddly, the Moore letter claims that this policy is somehow not applicable to the Project for two reasons. First, it claims that the Policy is inapplicable because the current General Plan designation for the site is Semi-Rural Residential (SR-.5), which allows ½

acre lots. It claims that half acre lots are not large enough to allow on-site septic. This argument is irrelevant. The current designation for SR-.5 does not *require* half acre lots or guarantee that landowners will be allowed to subdivide the property into half acre lots. Rather, it merely allows this as a possible maximum density if development on those lots is *also* consistent with other General Plan and Community Plan policies, including the requirement for on-site septic. Thus, even if current zoning or General Plan designations might otherwise allow for smaller lots, the County may not allow subdivision unless the subdivided lots will be large enough to utilize on-site septic systems. See *FUTURE*, 62 Cal.App.4th at 1342 (“a subdivision must not only be consistent with the general plan map, but also consistent ‘with the plan’s written policies and standards regarding uses, density, and intensity.’”).⁹

The Moore letter also makes the irrelevant observation that the Project would be designated with Village Regional designations and that villages are typically served by sewer systems. It may be true that villages are typically served by sewer systems, but this does not somehow make the policy inapplicable to the Project. On the contrary, it demonstrates that this Project—or any new or expanded village in the Community Plan area—is inconsistent with the Community Plan. The Community Plan does not contain an exception to its septic requirement for new village areas.

IV. The Project Fails to Comply With Various Standards For Protection of Health and Safety Due to Wildfire.

A. The Project Violates the County’s Fire Protection Standards for Secondary Egress, and There Is No Evidence to Support An Exception to These Standards.

The Project site is located within a statutorily designated State Responsibility Area Very High Fire Hazard Severity Zone. Numerous fires have burned through this area over the past decades. As outlined in a draft Fire Protection Plan for the Project, there have been 18 wildfires within three miles of the Project site since 1980. See Fire

⁹ Although the land is designated for SR-.5, it is zoned A70. As the County’s zoning ordinance describes, “[t]he A70 Use Regulations are intended to create and preserve areas intended primarily for agricultural crop production.” San Diego County Zoning Ordinance, Agricultural Use Regulations, § 2700. Having the properties zoned for agricultural crop production in no way supports an inference that septic systems were not intended for the parcels. On the contrary, it highlights the fact that the parcels were never intended for high-density residential development.

Protection Plan, Harmony Grove Village South, March 2015 at 15. These have burned more than 180,000 acres. *Id.* As recently as 2014, the Cocos Fire caused a mandatory evacuation order for the Harmony Grove Community and burned 26 homes and many outbuildings at the dead end of Country Club Drive within 1/4 mile of the Project.¹⁰

The County's Fire Code requires that developments meet numerous, strict standards in order to protect health and safety, ensure that emergency vehicles can access sites, and ensure that residents can evacuate safely. Relevant here, section 503.1.3 of the Fire Code states: "Dead-end roads. The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served: . . . Parcels zoned for less than 1 acre: 800 feet." This regulation ensures that residents have multiple egress routes so that if one road is blocked in the event of a fire, residents can still escape. It also ensures that there are multiple routes for emergency personnel to access a site, thereby providing firefighting and emergency response capabilities.

The requirement for secondary egress is absolutely crucial. CalFire publishes a "personal wildfire action plan" that describes how families should "[h]ave several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment." CalFire, Ready, Set, Go!: Your Personal Wildfire Action Plan, at 10, attached as Exhibit 5. This allows residents to "[c]hoose an escape route away from the fire." *Id.* See also *id.* at 8 (families should "Plan several different evacuation routes"). Similarly, the Rancho Santa Fe Fire District cautions that residents should "[i]dentify a minimum of two (2) main exit routes from your neighborhood. Map out alternative routes in the event main routes are blocked." See Getting Out Alive: Preparing for Wildfire and Evacuation in the Wildland Urban Interface at 6, attached as Exhibit 6. The Fire District emphasizes the importance of having a secondary evacuation route because, "[w]hen evacuating, [residents should] use a route that takes you in the opposite direction of the fire."¹¹ The Fire District also cautions that some roads may be closed during emergencies in order to facilitate emergency equipment.¹²

¹⁰ See <http://www.nbcsandiego.com/news/local/Firefighters-Respond-to-New-Fire-in-San-Marcos-259298161.html>

¹¹ <http://www.rsf-fire.org/prepare/wildfire/index.html>

¹² <http://www.rsf-fire.org/prepare/wildfire/index.html>

Here, the Project proposes to subdivide the property into parcels that are less than an acre in size, thereby triggering the requirement to have no dead-end roads longer than 800 feet. However, the Project proposes to have a dead-end road that is *1.3 miles long*. See Harmony Grove Village South Fire Protection Plan at 20, attached as Exhibit 7. Accordingly, some Project residents would have to drive 1.3 miles before they have a choice of directions to escape. Emergency vehicles would also have to access the Project on the same road that residents are using to attempt to escape.

Despite the overwhelming need for and logic of providing a secondary egress route, the Project applicant is currently asking the County to waive this requirement. Although the County has some discretion to approve exceptions to the County Fire Code, there is no possible justification for approving this requested exception. In order to approve it, the relevant fire code official must find that the exception “is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements.” County Fire Code § 96.1.104.8. The applicant must also provide material facts to support its request for the exception, as well as mitigation measures to address safety impacts caused by the exception. *Id.*

In its proposed Fire Protection Plan, the Project applicant admits that the Project will not meet the Fire Code’s standards for secondary egress and attempts to demonstrate that the Project nevertheless meets the intent and purpose of the code and will not threaten public safety. These justifications and rationales are unconvincing and do not provide substantial evidence to support the requested exemption.

First, the Project applicant states that a secondary egress route will be available, though admits that the route does not meet Fire Code standards for grade, pavement surface and other attributes. FPP at 33. In addition to these inadequacies, the route is located far more than 800 feet from residences in the south-western Project area. See FPP, Appdx. E. Due to the location and substandard condition of the road, this potential escape route does not assure protection of health, life and fire safety requirements or meet the intent of the Fire Code’s requirement for secondary egress.

The Project applicant also states that Country Club Drive will be widened to include three travel lanes, therefore allowing for greater access and less risk of congestion in the event of evacuation. FPP at 33. This justification ignores that secondary egress routes are important because they allow residents to escape in a different direction than a fire. Having more travel lanes will do no good if a fire is burning to the west of the Project and proceeds to burn along the Escondido Creek corridor, covering the Project’s only evacuation route in dense smoke or fire. This creek corridor is filled with natural

vegetation and is a large source of fuel. The FPP also does not describe whether the bridge will be constructed of nonflammable material that can withstand a blaze. If it is not, a fire could completely destroy the only meaningful escape route for Project residents.

The applicant claims that an exception is warranted because the Project will allegedly exceed standards for ignition-resistant buildings, fuel-modification zones, vegetation-free buffers around homes, and fire hydrant flow requirements. *Id.* at 34-36. But none of these measures make up for the lack of adequate egress. Although they may help ensure that Project homes do not burn, they do nothing to ensure that residents can evacuate in a timely manner in order to avoid smoke from approaching wildfires. Experts recognize that “[s]moke from California wildfires injures and kills more individuals than the actual fires.”¹³

Ironically, the Fire Protection Plan states that one of its mitigation measures is the development of an emergency preparedness guide based on CalFire’s “Ready, Set, Go!” model. FPP at 38. As described above, CalFire’s model plan states that residents should always have multiple evacuation routes. Thus, the applicant’s proposed mitigation measure cannot reasonably be said to resemble CalFire’s model, as it ignores one of the main safety features recommended by CalFire: multiple evacuation routes.

In sum, the Project applicant is not requesting a minor exception to the Fire Code. Rather, it is asking that the County accept significantly reduced fire safety standards on a very large development project. The proposed dead-end road that would serve the Project is *more than 8.5 times as long* as the maximum allowed distance for dead-end egress routes. And the Project would include more than 450 homes in an area that is subject to severe wildfire and that was evacuated as recently as a year ago. This is completely unacceptable and the County may not approve such a dangerous exception to its Fire Code.

B. The General Plan Prevents the County From Approving a Fire Code Exception.

The County must abide not only by the Fire Code’s rules for egress, but must also comply with the General Plan. Thus, even if the Fire Code allowed the County to approve an exception to the secondary egress standard in this instance, the County must still analyze consistency with the General Plan. Here, the General Plan states that:

¹³ <http://waterdamagesd.com/wildfire-smoke-dangerous/>

New development should be located and designed to protect life and property from [fire] and similar hazards. In high risk areas, development should be prohibited or restricted in type and/or density. In other areas, structures, properties, infrastructure, and other improvements should be designed to mitigate potential risks from these hazards. Development that cannot avoid high risk areas should be carefully reviewed for consistency with County building codes and development regulations to eliminate or minimize potential risks.

It also has other policies that address wildfire risk and the need for effective evacuation. For instance, Policy S-2.6 states: “Effective Emergency Evacuation Programs. Develop, implement, and maintain an effective evacuation program for areas of risk in the event of a natural disaster.”

The Project fails to comply with these General Plan policies. Rather than prohibiting or restricting development in this high fire danger area, the County is proposing to allow more than 450 new homes. Instead of carefully reviewing the Project for consistency with the Fire Code, the Project applicant is requesting a dangerous and possibly unprecedented exception from one of the Code’s main safety provisions. The County cannot develop and implement an effective evacuation program for more than 1,000 new residents that live down a dead-end road in a development with only one effective evacuation route. The Project clearly conflicts with the General Plan and the County must reject it.

C. Allowing An Exception for the County’s Secondary Egress Standards Would Violate the County’s Hazard Mitigation Plan and Jeopardize Federal and State Disaster Funding.

The County took part in preparing the Multi-Jurisdictional Hazard Mitigation Plan (“Hazard Plan”),¹⁴ which is a disaster preparedness document adopted to comply with the Disaster Mitigation Act of 2000. Under this federal legislation, increased funding is available to states and jurisdictions that have developed comprehensive mitigation plans, and states and communities must have an approved mitigation plan in place prior to receiving post-disaster funds. In order to ensure that the County can take full advantage of state and federal disaster-related grant programs, it must comply with the adopted hazard mitigation plan.

¹⁴ Available at <http://www.sandiegocounty.gov/content/dam/sdc/oes/docs/2010-HazMit-Final-August-2010.pdf> and excerpts attached as Exhibit 8.

The Hazard Plan describes how the County's topography "creates an ever-present threat of wildland fire" and the County should use large fires, such as the Firestorm of October 2003, "as a guide for fire planning and mitigation." *Id.* at 4-43. It also lists specific goals for reducing wildfire risk and actions the County will take to carry out those goals. Relevant here, the Hazard Plan promulgates the goal of "[p]romot[ing] disaster-resistant future development." *Id.* at 5-294. To carry out this goal, the County committed to "[f]acilitate consistent enforcement of general plans, zoning ordinances, and building codes," and to "[l]imit future development in hazardous areas." *Id.* The County also committed to ensure that "[h]igh fire hazard areas shall have adequate access for emergency vehicles." *Id.*

The Project violates these standards. First, the proposed Project would require an exception to the County's requirement for secondary egress. To the best of my knowledge, the County has never before granted such a large exception for a project of this size. As described above, any such exception is unjustified and would not protect residents' health and safety. Accordingly, granting this exception would mean that the County is not consistently enforcing its general plan and building code requirements for fire safety and secondary egress, as required by the Hazard Plan.

Second, if the Project includes only one County-compliant egress route, this would violate the County's commitment to ensure that high fire hazard areas have adequate emergency vehicle access. With only one route in and out of the Project site, emergency vehicles may have inadequate access because residents will be using the same street to evacuate. Further, emergency vehicles need to be able to evacuate if they are fighting a fire that becomes too threatening. With only one egress route, the Project could trap firefighters in a deadly blaze. Last, the Project does not limit development in hazardous areas, as required by the Hazard Plan. Rather, it would place hundreds of homes and more than a thousand new residents at risk.

The County must analyze the inconsistency of the Project with this Hazard Plan as part of its environmental review pursuant to the California Environmental Quality Act. 14 Cal. Code Regs. § 15125(d) (environmental impact reports must analyze inconsistencies between a proposed project and applicable regional plans for protection of resources); 14 Cal. Code Regs., §§ 15000 et seq, Appendix G, § VIII(g) (projects may have significant environmental impacts if they will "[i]mpair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan"). As part of this analysis, it must analyze whether these inconsistencies may lead to reduced federal and state disaster funding, and consequent environmental impacts. For example, if Project approval causes the County to violate the Hazard Plan, and therefore

risk losing disaster funding, it is reasonably foreseeable that reduced funding may cause environmental impacts related to the County's inability to prepare for and clean up after future disasters.

The Project's inconsistency with the Hazard Plan could jeopardize the County's ability to receive state or federal disaster funding in the event of a natural disaster. The County expended time and resources helping develop the Hazard Plan and cannot and should not lightly throw aside the commitments it made in that Plan. As the Plan states, the County is committed to consistently enforcing its Fire Code. Consistent enforcement requires the County to reject any version of this Project that includes only one compliant evacuation route.

D. Even if the County Could Proceed With This Project, It Should Rely on the Rancho Santa Fe Fire District, Not CalFire, to Provide Firefighting Services.

The Project site lies within the Rancho Santa Fe Fire District's sphere of influence, and the District has submitted a LAFCO application to annex this land. Nevertheless, I understand that the County is considering having the County Fire Authority take jurisdiction for fire services for this Project, and then contracting with CalFire to provide the services. This is both a risky proposition as well as unnecessary.

It is not clear that CalFire may lawfully contract with the County to provide firefighting services that facilitate rural, non-infill development such as this Project. As a state agency, CalFire is legally obligated to ensure that its funding and infrastructure decisions conform to the state's planning priorities and Environmental Goals and Policy Report ("EGPR"), codified in Section 65041.1 of the Government Code. As described in the attached letter sent to CalFire, these priorities include promoting infill development, protecting agricultural and open space land, and reducing driving and associated greenhouse gas emissions.

Here, the HGVS Project is located in a rural area, will convert large swaths of farmland, and will likely cause greater driving and climate pollutants because it is relatively far from sizable commercial and job centers. Accordingly, I have asked CalFire to provide information regarding whether its provision of infrastructure, funding and services to rural developments such as HGVS will conform with state law. If the County wishes to contract with CalFire for services for this Project, I believe it would be inappropriate for the County to proceed with processing this development application until the issue of CalFire's ability to lawfully provide these services is resolved.

There is also no reason for the County to contract with CalFire for fire services in this location. As described above, the Rancho Santa Fe Fire District has submitted an application to LAFCO to annex the Elfin Forest/Harmony Grove area, which lies within its sphere of influence. The Rancho Santa Fe Fire District will be able to provide adequate service to the rural residences in the area, and this annexation makes logical sense, as the District already serves much of the surrounding area.

The Rancho Santa Fe Fire District will also be able to provide an impartial assessment of whether the Project may legitimately obtain an exception to the County's secondary egress standard. In contrast, if the County Fire Authority took jurisdiction of the area as part of a contract for services with CalFire, the Town Council is concerned that the County might be unduly inclined to approve such an exception to the egress standard. This is because the Project is slated to be served by the planned Harmony Grove Village fire station, yet this station is currently underfunded. Approving HGVS would provide more homes and more funding for this fire station, thereby helping address this funding shortfall. Although the funding shortfall is serious and the County should consider all reasonable ways to rectify it, the County cannot and should not allow such budget decisions to sway its determination of whether to approve this Project or give itself the authority to approve an exception to its fire standards. The lack of appropriate secondary egress is an incredibly important public safety issue that cannot be swept aside for the sake of correcting the County's failure to secure adequate funding for the HGV fire station.

Conclusion

The proposed Project violates numerous, core policies of the Community Plan and General Plan and the County must reject it.

County of San Diego
June 25 2015
Page 26

Regards,



Erin B. Chalmers
SHUTE, MIHALY & WEINBERGER LLP

cc (e-mail only):

Bill Horn, Supervisor, District 5
Dave Roberts, Supervisor, District 3
Dianne Jacob, Supervisor, District 2
Ron Roberts, Supervisor, District 4
Greg Cox, Supervisor, District 1
David Sibbett, Planning Manager, PDS
Cara Lacey, Interim Chief of Project Planning
Bruce Liska, San Dieguito Planning Group
David Kovach, RCS Harmony Partners, LLC
Marcel Arsenault, Real Capital Solutions
Brian Paul, Homebuilder Capital Solutions

(Only Exhibit 1 is being attached for those on the cc list)

Exhibits:

- 1) June 25, 2015, Letter to CalFire re Environmental Goals and Planning Report
- 2) Harmony Grove Village Sewer District Boundary
- 3) Q. Eastman, *Supervisors Approve Harmony Grove Village*, Feb. 8, 2007
- 4) San Diego County General Plan Update EIR (excerpts)
- 5) CalFire, Ready, Set, Go!: Your Personal Wildfire Action Plan

- 6) Getting Out Alive: Preparing for Wildfire and Evacuation in the Wildland Urban Interface
- 7) Harmony Grove Village South Fire Protection Plan
- 8) Multi-Jurisdictional Hazard Mitigation Plan

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EXHIBIT 1

SHUTE MIHALY
& WEINBERGER LLP

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

ERIN B. CHALMERS
Attorney
chalmers@smwlaw.com

June 25, 2015

Via E-Mail and U.S. Mail

Tony Mecham
Unit Chief, San Diego Unit
California Department of Forestry and Fire
Protection
2249 Jamacha Rd.
El Cajon, CA 92019

Re: Consistency Between State Environmental Goals and Policy Report
and Fire Service to Harmony Grove Village South

Dear Mr. Mecham:

This firm represents the Elfin Forest Harmony Grove Town Council (“Council”) in matters related to San Diego County’s consideration of the proposed Harmony Grove Village South Project (“HGVS Project”). It also represents the Cleveland National Forest Foundation in matters related to the County’s consideration of the proposed Lilac Hills Ranch Project (“Lilac Hills Project”). This firm recently learned that the California Department of Forestry and Fire Protection (“CalFire”) might enter into a contract with the County to provide fire protection services and associated infrastructure to the HGVS Project. Likewise, the County is currently planning to rely on CalFire’s Miller station to provide primary firefighting and first responder infrastructure and service for the 1700 plus home Lilac Hills Project.¹

I question whether it is inappropriate for CalFire to provide infrastructure, funding or support that facilitates the approval and construction of the HGVS and Lilac Hills Projects or similar large, sprawl developments located in the fire-prone wildland urban interface. As a state agency, CalFire is legally obligated to ensure that its funding and infrastructure decisions conform to the state’s planning priorities and Environmental

¹ See Lilac Hills Ranch Fire Protection Plan, pp. 27-31, at http://www.sandiegocounty.gov/content/dam/sdc/pds/regulatory/docs/LILAC_HILLS_RANCH/Recirculation/GPA12001-REIR-AppendixJ-Fire_Protection_Plan-061214.pdf.

Goals and Policy Report (“EGPR”), codified in Section 65041.1 of the Government Code. As described more fully below, these priorities include promoting infill development, protecting agricultural and open space land, and reducing driving and associated greenhouse gas emissions. Here, the HGVS and Lilac Hills Projects are located in rural areas, will convert large swaths of farmland, and will cause greater driving and climate pollutants. They are also located in high fire danger zones.

Pursuant to Government Code section 65042(c), which directs every state agency and officer to “[c]omply with any request for advice, assistance, information, or other material” related to that agency’s compliance with the EGPR, I request that CalFire provide information regarding whether its planning documents conform to the state’s planning priorities and the EGPR. I also request that CalFire determine whether it may lawfully provide funding, infrastructure or other support for the HGVS or Lilac Hills Projects. If CalFire believes that it may provide such support, please provide information demonstrating how this support complies with the state’s planning priorities and EGPR.

CalFire provides vital services to many rural areas, and the public is indebted to CalFire for the hard and often dangerous work its employees perform in order to protect the state’s residents and resources. At the same time, the state has limited resources and has enacted laws to ensure that CalFire and other state agencies carefully utilize these resources to further particular health, safety and environmental goals and to protect taxpayer resources. I appreciate CalFire’s careful consideration of this matter.

California Law Sets Environmental Planning Priorities for State Agencies

Under California law, state agencies and officials that request infrastructure funding must “specify how that infrastructure is consistent with the state planning priorities specified pursuant to [Government Code] Section 65041.1.” Gov. Code § 13103. Those priorities include promoting infill development and ensuring that any infrastructure associated with non-infill development supports efficient land use, is built adjacent to existing developed areas, is in an area appropriately planned for growth, is served by adequate transportation and other essential utilities and services, and minimizes ongoing costs to taxpayers. Gov. Code § 65041.1(a), (c). They also include “protecting, preserving, and enhancing the state’s most valuable natural resources, including working landscapes such as farm, range, and forest lands, natural lands such as wetlands, watersheds, wildlife habitats, and other wildlands” Gov. Code § 65041.1(b). Agencies must ensure that their functional plans are consistent with these priorities and “annually demonstrate” such consistency when requesting funding. Gov. Code § 65042(b).

Agencies must also look to the EGPR “as a basis for judgments about the design, location and priority of major public programs, capital projects and other actions, including the allocation of state resources for environmental purposes through the budget and appropriation process.” Gov. Code § 65047(e). The current version of the EGPR commits California to “more compact urban areas . . .” EGPR (1978) at 9.² To that end, agencies should focus on “curbing wasteful urban sprawl and directing new development to existing cities and suburbs.” *Id.* The EGPR also prioritizes “protecting the most productive agricultural lands.” *Id.* at 9, 18.

California, through the Office of Planning and Research, is in the process of updating the EGPR. The current draft directs local governments to “avoid placing infrastructure, housing, and other amenities in harm’s way without careful consideration of alternatives and co-benefits associated with the choices.” Draft EGPR at 26.³ At the same time, the draft notes that an “increase in the frequency and severity of extreme events, including. . . wildfires . . . poses potential risks to new and existing infrastructure.” *Id.* at 32.

The draft also prioritizes the protection of agricultural land and encourages compact, transit-oriented and walkable development as a way to minimize greenhouse gas emissions. According to the current draft, “[c]ompact, infill and redevelopment [are] the first priority for new development, coupled with a goal to preserve natural and working lands.” *Id.* at 3. California should preserve “[i]ntact natural systems and prime agricultural land [to] provide resilience for the natural and built environment.” *Id.* Moreover, California can reduce the amount of land needed to accommodate growth by implementing aggressive smart-growth policies including “higher density, mixed-use development, better access to transit, and other policies that facilitate reductions in driving. This reduction in land consumption can reduce pressures on agricultural and working lands, forests, and other important land resources.” *Id.* at 11. To that end, the current draft also prioritizes investments in public transit and walkable communities that are close to jobs and “provide viable alternatives to driving.” *Id.* at 15.

CalFire’s planning documents acknowledge the high costs associated with increased residential development in the wildland urban interface, but fail to demonstrate

² See 1978 EGPR: An Urban Strategy for California, at http://www.opr.ca.gov/docs/urban_strategy.pdf.

³ See Discussion Draft, California’s Climate Future, at http://opr.ca.gov/docs/EGPR_ReviewDraft.pdf.

consistency with the EGPR. They do not discuss how CalFire's provision of services to large new, rural development projects facilitates more sprawling, leap-frog development in high-risk fire zones, nor do they explain how this is consistent with state planning priorities. For example, CalFire's 2010 Strategic Fire Plan notes that climate change will result in "longer fire seasons and a greater probability of intense fires in western forests." CalFire Strategic Fire Plan at 5 (2010).⁴ At the same time, "the exposure of people and homes to these threats has increased due to population growth and development in wildland and wildland urban interface (WUI) areas." *Id.* Together these trends "complicate fire suppression and, in turn, increase the need for *fire prevention and planning efforts*." *Id.* at 6 (emphasis added). CalFire plans to "[a]rticulate and promote the concept of land use planning as it relates to fire risk" as one way to deal with these threats. *Id.* at 11. At no point, however, does the Strategic Fire Plan mention the EGPR or the planning priorities listed in Section 65041.1 of the Government Code.

CalFire's San Diego Unit Strategic Fire Plan contains the same acknowledgement of the risks, but again omits any mention of the State's planning priorities regarding infill and efficient development. *See* CalFire San Diego Unit Plan at 3 (2014)⁵ (explaining that wildland fire planning "is about the whole system of wildland fire planning and thinking about where and how people live and coexist within wildfire prone environments"); *id.* at 7 (noting that climate change, population growth in the wildland urban interface, and reduced budgets "will continue to pose challenges to the Unit regarding fire suppression, prevention, and planning"). In a particularly prescient paragraph, the San Diego Unit's Strategic Plan notes that there is a "resurgence of urban interface development in the community of Harmony Grove within SRA lands." *Id.* at 29. These are the very same sorts of development that CalFire consistently ranks as the riskiest and costliest forms of development.

These planning documents rightfully discuss the risks of placing new development in the wildland urban interface. However, they do not discuss whether CalFire needs to limit provision of infrastructure, funding and services to certain types of development projects in order to comply with the state's planning priorities and EGPR.

⁴ See CalFire Strategic Fire Plan (2010), at <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf668.pdf>.

⁵ See CalFire San Diego Unit Plan (2014), at http://cdfdata.fire.ca.gov/fire_er/fpp_planning_plans_details?plan_id=208.

San Diego County Is Relying On CalFire Infrastructure and Services to Approve New Sprawl Development

The Lilac Hills Project is a very large residential and commercial development that would be located in the Valley Center and Bonsall planning areas. The project would develop hundreds of acres of productive farmland and would indirectly, negatively impact numerous other, nearby agricultural operations. It would be located far from Escondido and any other existing, large communities, and the property is not designated for dense development under the existing County General Plan. Additionally, it is inconsistent with SANDAG's Sustainable Communities Strategy. According to the Project's EIR, the Project's residents, employees and visitors would drive *60 million miles* per year, causing emission of more than 20,000 metric tons of climate pollutants ever year. The Project area is not served by transit. Portions of the Project are also located in very high fire danger zones.

Pursuant to its General Plan, the County requires new development of this type to demonstrate that all residences can be reached by fire and emergency services within 5 minutes. The Deer Springs Fire Protection District is the fire authority with jurisdiction over this Project.⁶ However, as that Fire District has explained to the County, it cannot provide the required response times for the Project.⁷ Accordingly, the Project's Fire Protection Plan relies on CalFire Station 15 (Miller Station), which is closer to the Project, to provide the required 5 minute response time.⁸

⁶ See Lilac Hills Ranch Fire Protection Plan, at http://www.sandiegocounty.gov/content/dam/sdc/pds/regulatory/docs/LILAC_HILLS_RANCH/Recirculation/GPA12001-REIR-AppendixJ-Fire_Protection_Plan-061214.pdf, p. 24.

⁷ http://www.sandiegocounty.gov/content/dam/sdc/pds/regulatory/docs/LILAC_HILLS_RANCH/Recirculation/publiccomment/Deer%20Springs%20Fire%20Protection%20District.pdf

⁸ Lilac Hills Ranch Fire Protection Plan, pp. 27-30 (listing Deer Springs Fire Station 11 as the primary fire station for the Project but admitting that this station can only provide 7-9 minute response times, and that the location of CalFire's Miller Station near the Project will be "critical" for providing "emergency service (medical emergencies, vehicle accidents, and structure and wildland fires)" for the Project).

The HGVS Project is located east of Escondido and South of San Marcos in the Elfin Forest/Harmony Grove planning area. The Project would construct more than 450 homes on small lots in this rural valley. Although the County has not yet conducted environmental review, the Project will likely have significant greenhouse gas emissions due to the Project's location far from existing cities, jobs and services. It will also develop dozens of acres of farmland. Notably, this type of urbanized development is specifically disallowed by the County's General Plan, which contains multiple policies to protect the rural nature of the area.

The Project site is located within a statutorily designated State Responsibility Area Very High Fire Hazard Severity Zone. According to draft Project documents, the Project would have only one entrance and egress route. It would therefore conflict with County General Plan fire safety standards, which generally require multiple egress routes. As currently proposed, the County will have to obtain an exception to this standard from the fire authority with jurisdiction over the Project. This authority is currently the Rancho Santa Fe Fire District; however, I understand that the County Fire Authority is considering taking over jurisdiction itself, and would then want to contract with CalFire to provide fire protection services.

CalFire Must Demonstrate How Its Planning Documents and Infrastructure Decisions Conform With State Law

As described above, San Diego County wishes to rely on CalFire to provide critical firefighting infrastructure and services to at least two, large new development projects located in fire-prone areas. If CalFire wishes to facilitate these or other similar developments in the County by providing firefighting services, it will need to demonstrate that its Strategic Fire Plans allow the agency to provide these services, and that the Fire Plans, in turn, are consistent with the state's planning priorities and EGPR.

Pursuant to Government Code section 65042(c), I therefore request that CalFire provide information demonstrating whether or not it believes that providing infrastructure and services to large-scale, rural developments such as HGVS and Lilac Hills would be consistent with the EGPR and Government Code section 65041.1 priorities of supporting in-fill and reducing greenhouse gas emissions, curbing wasteful sprawl, protecting farmland, and avoiding putting people and homes in harm's way.

Thank you for your attention to this matter, and I look forward to your response.

Harmony Grove Village South Project
June 25, 2015
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Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



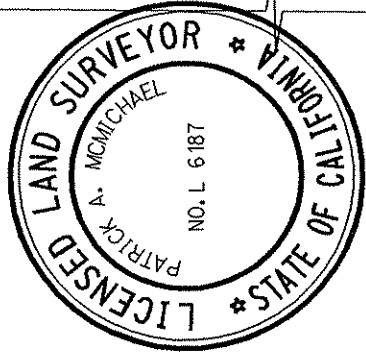
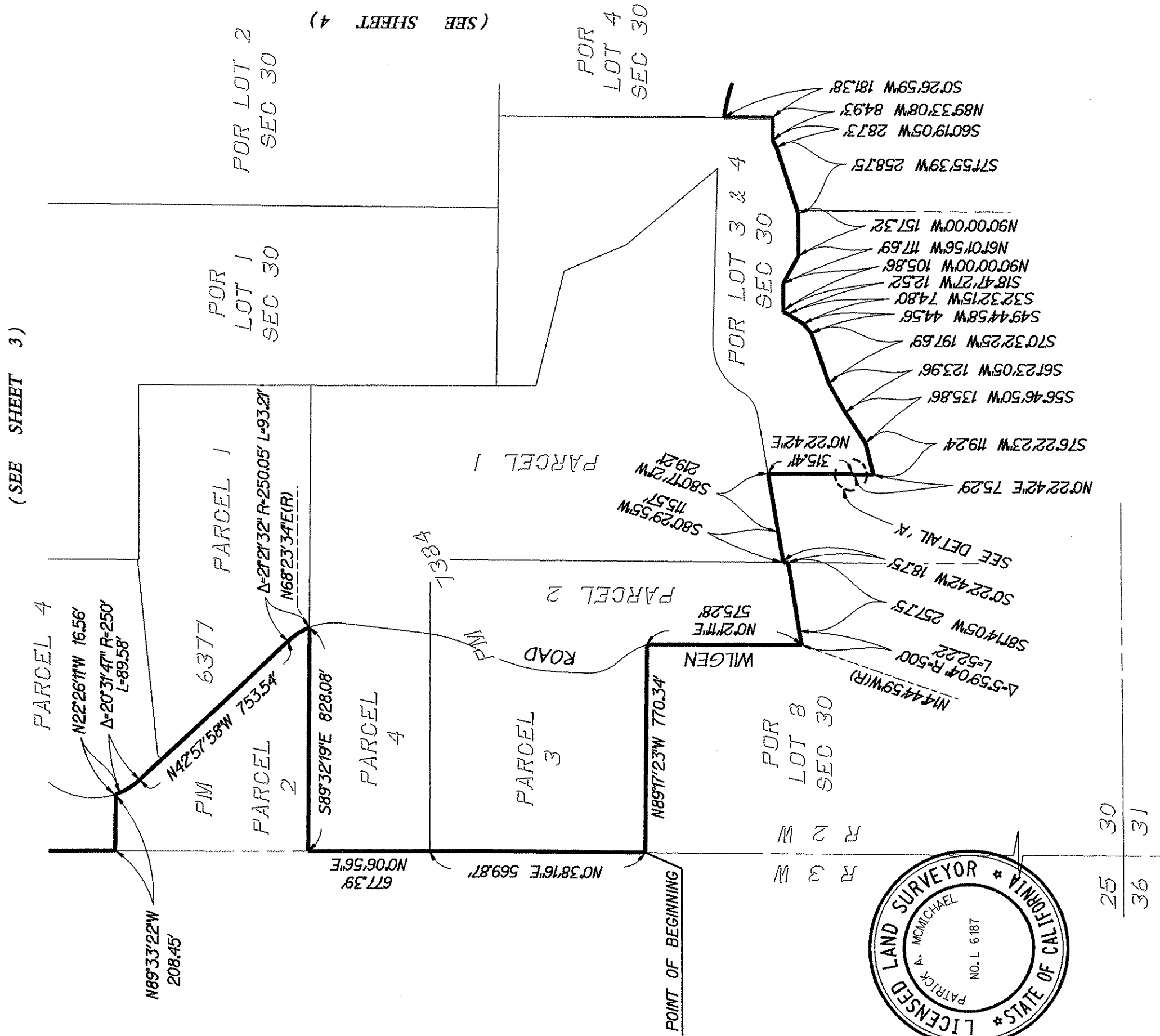
Erin B. Chalmers

cc: George Gentry, Executive Officer, Board of Forestry and Fire Protection
Stephanie Shimazu, Chief Counsel, Cal Fire
Ken Alex, Director, Governor's Office of Planning and Research
Jacqueline Arsivaud, Elfin Forest Harmony Grove Town Council
Duncan McFetridge, Cleveland National Forest Foundation

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EXHIBIT 2

EXHIBIT 'B'



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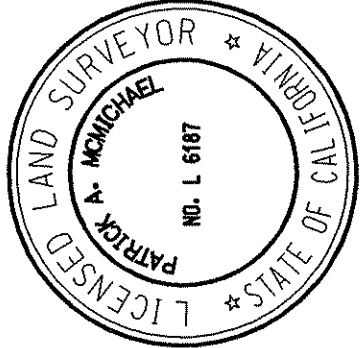
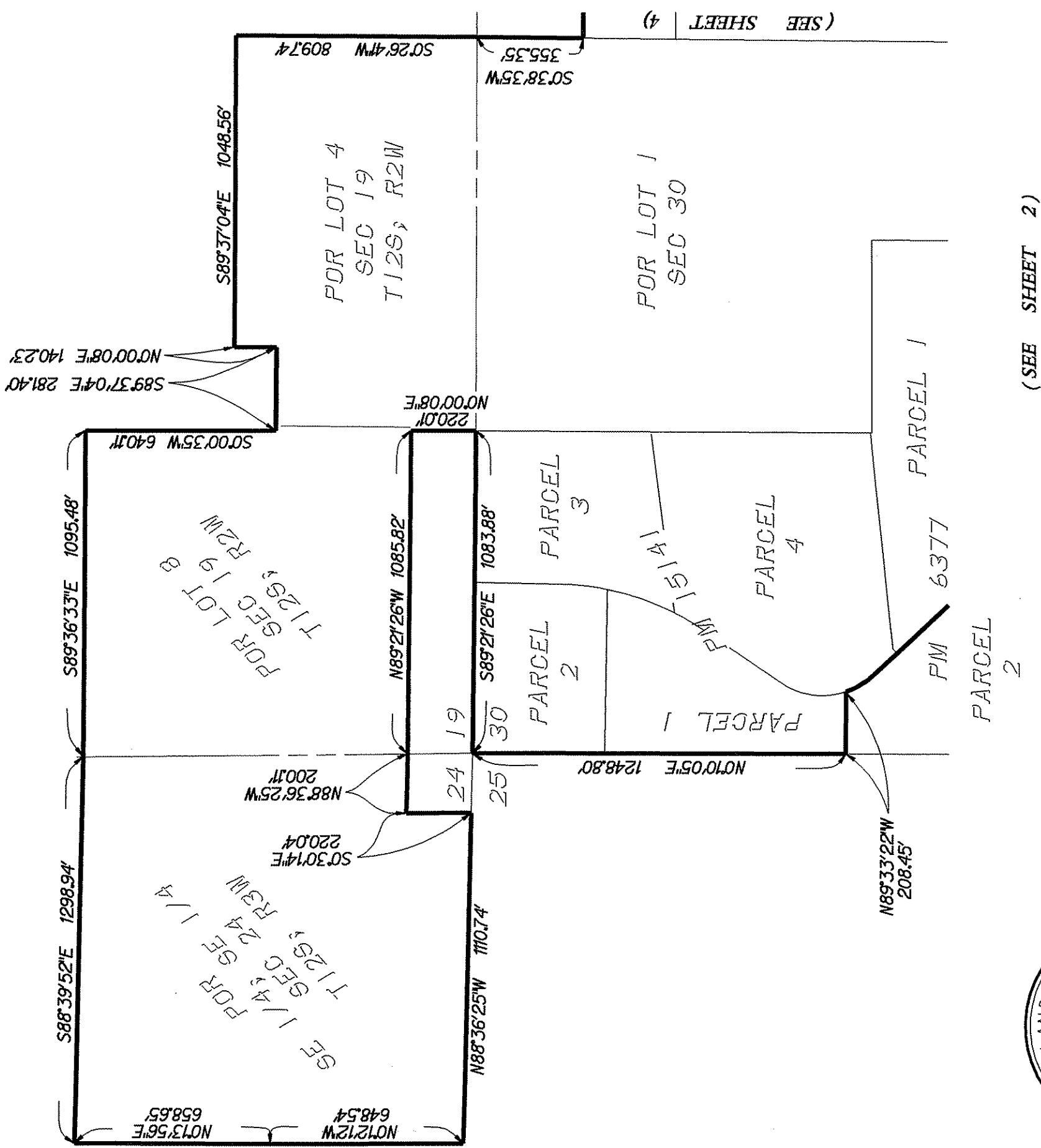
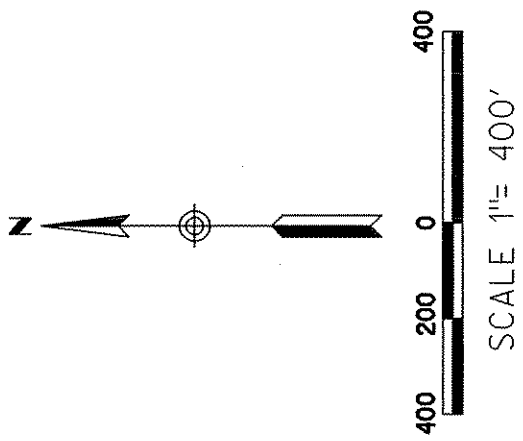


5620 FRIARS ROAD J. 14312-B
SAN DIEGO, CA 92110
619.291.0707
(FAX) 619.291.4165

HARMONY GROVE
SEWER MAINTENANCE DISTRICT BOUNDARY

Patrick A. McMichael 9/21/2007
PATRICK A. McMICAL, LS 6187 DATE

EXHIBIT 'B'

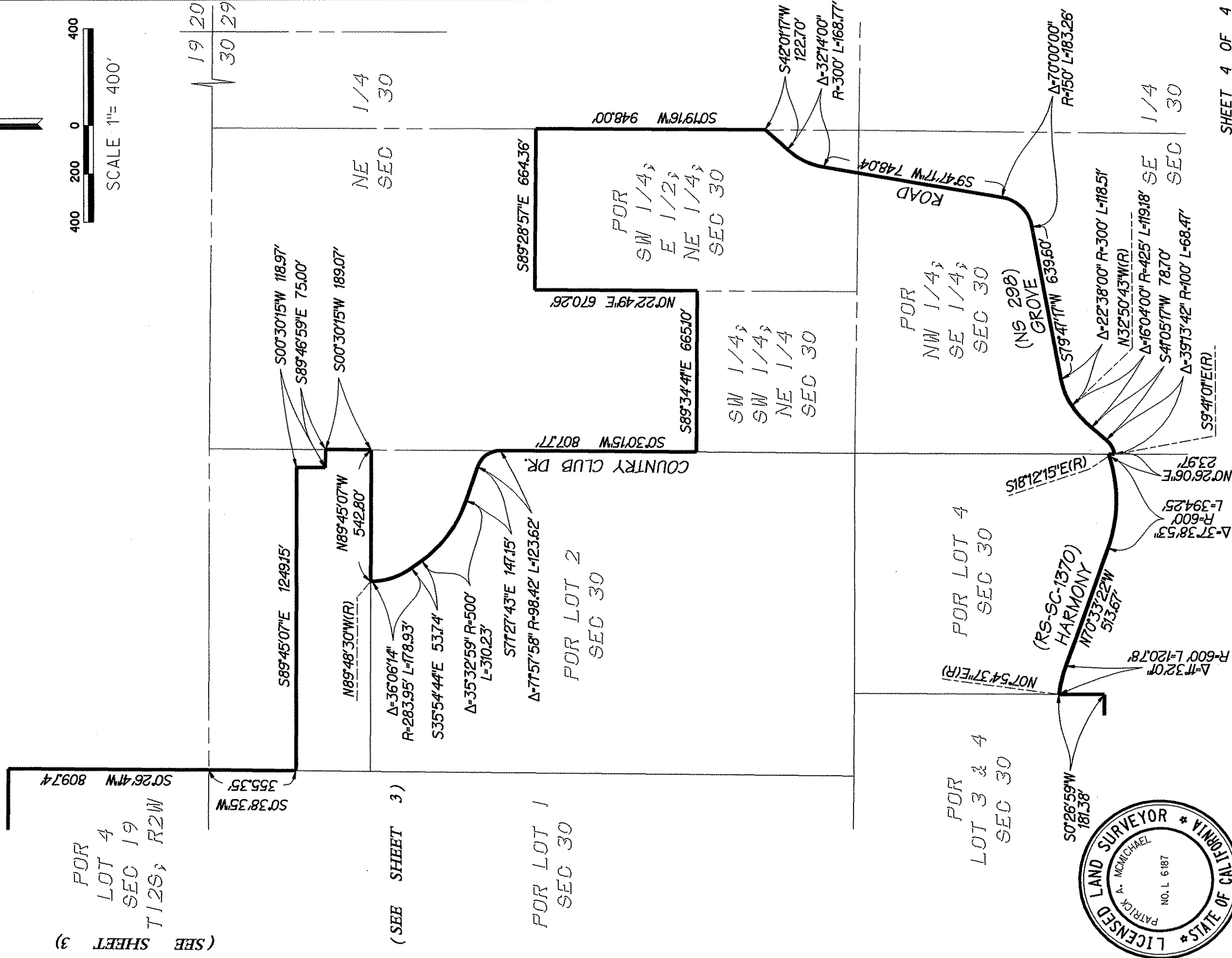
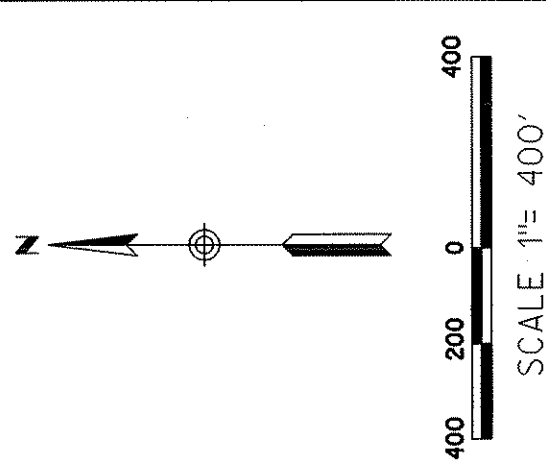


5620 FRIARS ROAD J. 14312-B
SAN DIEGO, CA 92110
619.291.0707
(FAX) 619.291.4165

Patrick A. McMichael
PATRICK A. MCMICHAEL, LS 6187
DATE 9/21-2010

HARMONY GROVE
SEWER MAINTENANCE DISTRICT BOUNDARY

EXHIBIT 'B'



SHEET 4 OF 4

***HARMONY GROVE
SEWER MAINTENANCE DISTRICT BOUNDARY***

rick
ENGINEERING COMPANY
5620 FRIARS ROAD J. 14312-B
SAN DIEGO, CA 92110
619.291.0707
(FAX) 619.291.4165

 PATRICK A. MCMICHAEL, LS 6187

7/21/2010 DATE

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EXHIBIT 3

SAN DIEGO UNION TRIBUNE

SUPERVISORS OK HARMONY GROVE VILLAGE

By QUINN EASTMAN - Staff Writer
Feb. 8, 2007

SAN DIEGO - A proposal to build a 742-home village in the rural Harmony Grove area west of Escondido sailed through the county Board of Supervisors on Wednesday.

Developer New Urban West is planning to build Harmony Grove Village on 468 acres, most of which were previously two chicken farms.

The project includes public trails and a private equestrian facility, a fire station, a sewer treatment plant and space for stores designed to serve the neighborhood. It has town houses and shopkeeper units in the center of the community, with more spacious spreads on its edges.

Construction could begin next year, the developer has said.

The supervisors hailed Harmony Grove Village's design process as a model of cooperation between a developer and a community.

"We've never had an audience so overwhelmingly in favor of a project," said Supervisor Bill Horn. More than 20 people addressed the board, mostly supporting New Urban West.

The Santa Monica-based developer held dozens of meetings over several years with the Elfin Forest/Harmony Grove Town Council, a civic association that represents the area.

The Town Council remained neutral on the project, partly because of concerns about the planned fire station, said its president, Eric Anderson.

Elfin Forest/Harmony Grove fire Chief Frank Twohy told county officials that even with the county's \$500,000 contribution annually, he would not have enough money to fully staff and equip the planned station.

Many members of the Town Council supported New Urban West's plan.

"Decades of mining and agricultural use have taken their toll on the community," said 30-year resident Bill Wilgenburg. "We are in need of a face-lift."

New Urban West enlisted wetlands experts to design a restoration project for a half-mile of Escondido Creek. It also formed a separate focus group called Friends of Harmony Grove Village, whose co-chairpersons both addressed the board urging the project's approval.

Even after extensive discussion with the community, officials had to forge a "safety enhancement" compromise over the future path of twisting Country Club Drive east of the project, limiting the speed to 25 mph.

The county's road designers had originally wanted to smooth out Country Club Drive's corners, citing its high accident rate and the expectation that traffic on the road will triple when new residents arrive.

But current residents opposed the changes to the road.

Gordon Fines, owner of Harmony Grove Equestrian Center, told the board that smoothing Country Club's curves to allow more cars would cut into his property and would be "devastating" to his horses and his business.

The main road in and out of the Harmony Grove Village project is a new east-west route that will connect with Citracado Parkway, which the city of Escondido is planning to extend.

County officials also had to assure people who live on or near Bresa de Loma Drive that the Harmony Grove Village project would not cut off access to their properties.

Other residents urged the board to define the scope of development around Harmony Grove, looking ahead to the unfinished General Plan 2020 update of zoning around the county.

"The only reason the room is not packed with residents opposing this project is their trust in county staff's plan," said Town Council member Jacqueline Arsivaud-Benjamin.

Several developers have been exploring projects nearby with county planners, but none of them have plans as advanced as New Urban West's.

County planning staff's proposed map under General Plan 2020 allows Harmony Grove Village, but limits other building nearby.

An alternative plan proposed by the supervisors calls for several housing projects with hundreds of homes to be built in the area.

Supervisor Horn noted that when the Harmony Grove Village project was first proposed, he thought the county's zoning update would be complete before the project came to the board.

The supervisors are supposed to vote on the zoning update, which has been delayed several times, in about a year.

- Contact staff writer Quinn Eastman at (760) 740-5412 or qeastman@nctimes.com

<http://www.utsandiego.com/news/2007/feb/08/supervisors-ok-harmony-grove-village/?#article-copy>

EXHIBIT 4

FINAL ENVIRONMENTAL IMPACT REPORT

**San Diego County General Plan Update
DPLU Environmental Log No. 02-ZA-001
State Clearinghouse (SCH) #2002111067**

COMMENT LETTERS AND RESPONSES TO COMMENTS ON THE DRAFT EIR

ORGANIZATIONS

Lead Agency:

**County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123
Contact: Devon Muto, Chief of Advanced Planning**

August 2011

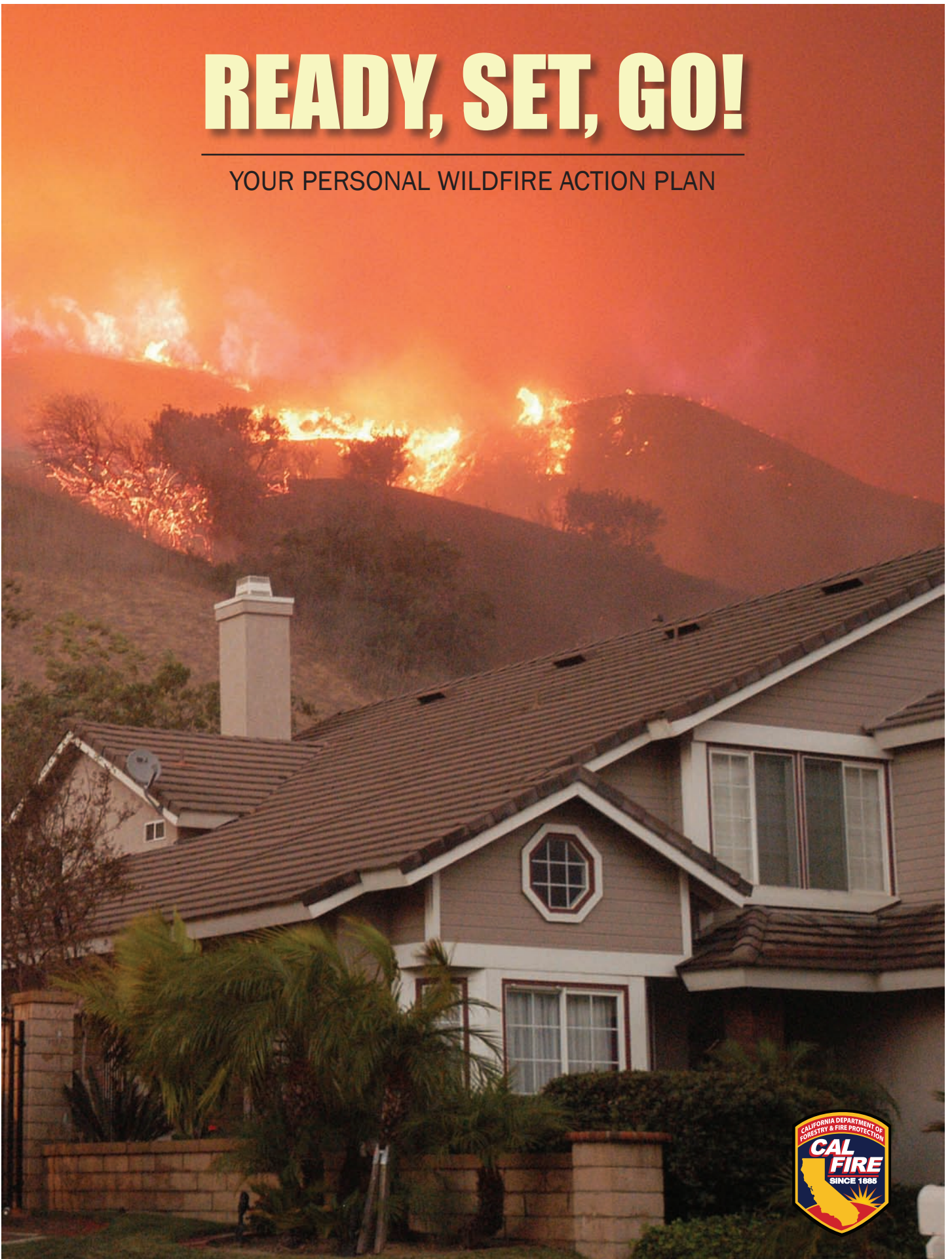
Responses to Letter O 3, East San Diego County Association of Realtors (cont.)

- O3-6 The County does not agree with this comment. There is no evidence shown to support the claim that conservation subdivisions would impact land use patterns or that they constitute an inefficient use of property.
- O3-7 The County does not agree with this comment. The County does not claim to offer certainty that subdividers will achieve potential yield of housing units under the CSP. However, County staff's research shows that the CSP will remove various constraints that currently result in loss of potential dwelling units. Furthermore, based on this research, standard or alternative septic systems will typically still be accommodated within the consolidated development footprint in a conservation subdivision.
- O3-8 The CSP is not a part of the General Plan Update documentation but it is a component of the overall project as described in the DEIR project description. The various ordinance amendments that make up the CSP are described in Sections 1.6, 1.8.5, 1.8.6, 1.8.7, and 1.8.8. In addition, the CSP is a mitigation measure in the DEIR for impacts to aesthetics, agriculture, and biology.
- O3-9 The subheading for this comment appears to be referring to the language of the draft General Plan (permissive language versus mandatory language); however, the comment goes on to state that it is the language of the DEIR that is at issue. In either case, the issue of mandatory language versus permissive language has been considered carefully in preparing the General Plan Update documents. The County has avoided the use of "should" because it desires a General Plan that is clear on its intent and avoids debate during application. This approach has also been supported by a number of stakeholders and commenters on the General Plan Update who have indicated that they desire clear and firm commitments to certain policies and actions. See also responses to comments G7-2 and O9-2.
- O3-10 The County acknowledges the East San Diego County Association of Realtors support for the Referral Map, however does not agree that the stated reason is valid. The Hybrid Map, as well as the Draft Land Use, and Environmentally Superior Map have been established and available for the public to comment on since early 2008. Additionally, the maps have been presented to the Community Planning and Sponsor Groups, stakeholder groups, and have been available online and for display at the Department of Planning and Land Use. The assertion that the hybrid and other alternatives would result as a "de-facto no growth tool" is not supported by fact. The Hybrid Map and Draft Land Use Map would accommodate approximately 75,000 and 74,700 additional housing units respectively, –under five percent less than the 78,000 that are accommodated by the Referral Map. Ultimately, the Board of Supervisors will determine which land use map will be implemented.
- O3-11 The County acknowledges the East San Diego County Association of Realtors' concern regarding the need for alternative septic systems, but does agree that the specific language requested is appropriate in the General Plan. The State is still developing new regulations for the use of alternative septic systems. Any specific language concerning alternative septic systems is more appropriately addressed in the County Onsite Wastewater System Ordinance.

EXHIBIT 5

READY, SET, GO!

YOUR PERSONAL WILDFIRE ACTION PLAN



READY, SET, GO!

Wildfire Action Plan

Saving Lives and Property
through Advance Planning



Wildfire is a serious threat to lives, property and natural resources in California. The men and women of CAL FIRE make countless preparations and train frequently in order to be ready for all types of emergencies, including wildfires. Residents need to do the same.

You can dramatically increase your safety and the survivability of your property by preparing well in advance of a wildfire. This brochure provides comprehensive information on how to improve your home's resistance to wildfires and prepare your family to be ready to leave early in a safe manner. We call this process, "Ready, Set, Go!"

The guide illustrates the importance of having defensible space around your home and it will help educate you about the preparations you need to make so you can leave early and evacuate well ahead of a wildfire. This brochure also provides information on how to retrofit your home with ignition resistant materials to address the threat of flying embers that can travel as far as a mile ahead of a flame front.

Fire is, and always has been, a natural part of the beautiful state we've chosen to live in. Wildfires, fueled by a build-up of dry vegetation and driven by hot, dry winds, are extremely dangerous and are challenging for firefighters to control. This publication will help you prepare your home so you can leave early; confident in the fact that you've done everything you reasonably can to protect your home from devastating wildfire.

I hope you'll find the information on the next pages helpful. As always, if you need more information about preparing for wildfire or any other disaster, contact your nearest fire station or visit us on the web at www.fire.ca.gov.

Chief Del Walters
Director, CAL FIRE

All suggestions and requirements are based on State Codes and Regulations, specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

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This publication was prepared by the Ventura County Fire Department. Special thanks to CAL FIRE, Orange County Fire Authority, FireSafe Council, Firewise Communities, and the Institute for Business and Home Safety as well as many other organizations for their contributions to content.

Ready, Set, Go! is supported by:



Living in the Wildland Urban Interface

Ready, Set, Go! begins with a house that firefighters can defend.

Defensible space works!

If you live next to a natural area, the Wildland Urban Interface, you must provide firefighters with the defensible space they need to protect your home. The buffer you create by removing weeds, brush and other vegetation helps to keep the fire away from your home and reduces the risks from flying embers.



A home within one mile of a natural area is at risk of flying embers. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildfire.



What is Defensible Space?



Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildfire conditions and for the protection to firefighters defending your home.

ZONE ONE

Zone One extends 30 feet out from buildings, structures, decks, etc.

- Remove all dead or dying vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from structures and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles or other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks.
- Remove or prune vegetation near windows.
- Remove “ladder fuels” (low-level vegetation that allows the fire to spread from the ground to the tree canopy). Create a separation between low-level vegetation and non-vegetative materials such as patio furniture, wood piles, swing set, etc., from tree branches. This can be done by reducing the height of low-level vegetation and/or trimming low tree branches.

ZONE TWO

Zone Two extends 30 to 100 feet out from buildings, structures and decks. You can minimize the chance of fire jumping from plant to plant or other non-vegetative combustible, by removing dead material and removing, separating, and/or thinning vegetation. The minimum spacing between vegetation is three times the dimension of the plant or other non-vegetative combustible.

- Remove “ladder fuels.”
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from other trees.
- Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches if erosion control is an issue.

What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what gives a home the best chance to survive a wildfire. Embers from a wildfire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildfire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildfire.



ROOFS

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

EAVES

Embers can gather under open eaves and ignite exposed wood or other combustible material.

VENTS

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents. New vents have been developed that prevent flame and embers from getting through to the attic.

WALLS

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

WINDOWS and DOORS

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames.

BALCONIES and DECKS

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home even further, consider protecting your homes with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

All suggestions and requirements are based on State Codes and Regulations, specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

Tour a Wildfire Ready Home

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (cleared vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking past what you own to determine the impact a common slope or neighbors' yard will have on your property during a wildfire.

Cut dry weeds and grass before 10 a.m. when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and other non-vegetative combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

Roof: Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with ignition resistant materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

Vents: Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with 1/8-inch to 1/4 inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

Install dual-paned windows with one pane of tempered glass to reduce the chance of breakage in a fire.

Consider limiting the size and number of windows in your home that face large areas of vegetation.


Inside: Keep working fire extinguishers on hand.

Install smoke alarms on each level of your home and in bedrooms. Test them monthly and change the batteries twice a year.

Address: Make sure your address is clearly visible from the road.

Decks: Surfaces within 10 feet of the building should be built with ignition resistant, non-combustible, or other approved materials.

Ensure that all combustible items are removed from underneath your deck.



Garage: Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Consider installing weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

Driveways and Access Roads: Driveways should be built and maintained in accordance to the state and local codes to allow fire and emergency vehicles to reach your house.

Consider maintaining access roads with a minimum 10-foot clearance on either side of the traveled section of the roadway and allowing for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to allow emergency vehicles to pass.

Fencing: Consider using ignition resistant or non-combustible fencing to protect your home during a wildfire.

Eaves and Soffits Protection: Eaves and soffits should be protected with ignition resistant or non-combustible materials .

Rain Gutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Water Supply: Consider having multiple garden hoses that are long enough to reach any area of your home and other structures on your property. If you have a pool or well, consider a pump.

Patio Cover: Use the same ignition resistant materials for patio covering as a roof.

Walls: Wood products, such as boards, panels or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.

Build or remodel with ignition resistant building materials, such as stucco, fiber cement, wall siding, fire retardant, treated wood, or other approved materials.

Be sure to extend materials from foundation to roof.

Chimney: Cover your chimney and stovepipe outlets with an approved spark arrestor non-combustible screen with openings no smaller than 3/8 inch and no larger than 1/2 inch to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

READY, SET, GO!

Create Your Own Wildfire Action Plan

Now that you've done everything you can to protect your house, it's time to prepare your family. Your **Wildfire Action Plan** must be prepared with all members of your household well in advance of a fire.

Use these checklists to help you prepare your Wildfire Action Plan. Each family's plan will be different, depending on their situation.

Once you finish your plan, practice it regularly with your family and keep it in a safe and accessible place for quick implementation.

GET READY |

Prepare Your Family



- ☐ Create a **Family Disaster Plan** that includes meeting locations and communication plans and practice it regularly. Include in your plan the evacuation of large animals such as horses.
- ☐ Have fire extinguishers on hand and train your family how to use them.
- ☐ Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- ☐ Plan several different evacuation routes.
- ☐ Designate an emergency meeting location outside the fire hazard area.
- ☐ Assemble an emergency supply kit as recommended by the American Red Cross.
- ☐ Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- ☐ Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- ☐ Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- ☐ Have a portable radio or scanner so you can stay updated on the fire.

GET SET

As the Fire Approaches

- ☐ Evacuate as soon as you are set!
- ☐ Alert family and neighbors.
- ☐ Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- ☐ Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- ☐ Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.
- ☐ Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

INSIDE CHECKLIST

- ☐ Shut all windows and doors, leaving them unlocked.
- ☐ Remove flammable window shades and curtains and close metal shutters.
- ☐ Remove lightweight curtains.
- ☐ Move flammable furniture to the center of the room, away from windows and doors.
- ☐ Shut off gas at the meter. Turn off pilot lights.
- ☐ Leave your lights on so firefighters can see your house under smoky conditions.
- ☐ Shut off the air conditioning.

OUTSIDE CHECKLIST

- ☐ Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- ☐ Turn off propane tanks.
- ☐ Don't leave sprinklers on or water running - they can waste critical water pressure.
- ☐ Leave exterior lights on.
- ☐ Back your car into the driveway. Shut doors and roll up windows.
- ☐ Have a ladder available.
- ☐ Patrol your property and extinguish all small fires until you leave.
- ☐ Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

IF YOU ARE TRAPPED: SURVIVAL TIPS

- ☐ Shelter away from outside walls.
- ☐ Bring garden hoses inside house so embers don't destroy them.
- ☐ Patrol inside your home for spot fires and extinguish them.
- ☐ Wear long sleeves and long pants made of natural fibers such as cotton.
- ☐ Stay hydrated.
- ☐ Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- ☐ Fill sinks and tubs for an emergency water supply.
- ☐ Place wet towels under doors to keep smoke and embers out.
- ☐ After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- ☐ Check inside the attic for hidden embers.
- ☐ Patrol your property and extinguish small fires.
- ☐ If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.



By leaving early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.

WHEN TO LEAVE

Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

WHERE TO GO

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.)

HOW TO GET THERE

Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an escape route away from the fire.

WHAT TO TAKE

Take your emergency supply kit containing your family and pet's necessary items.

EMERGENCY SUPPLIES

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildfire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross Web site at www.redcross.org.

- ☐ Three-day supply of water (one gallon per person per day).
- ☐ Non-perishable food for all family members and pets (three-day supply).
- ☐ First aid kit.
- ☐ Flashlight, battery-powered radio, and extra batteries.
- ☐ An extra set of car keys, credit cards, cash or traveler's checks.
- ☐ Sanitation supplies.
- ☐ Extra eyeglasses or contact lenses.
- ☐ Important family documents and contact numbers.
- ☐ Map marked with evacuation routes.
- ☐ Prescriptions or special medications.
- ☐ Family photos and other irreplaceable items.
- ☐ Easily carried valuables.
- ☐ Personal computers (information on hard drives and disks).
- ☐ Chargers for cell phones, laptops, etc.

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.



Write up your Wildfire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

My Personal Wildfire Action Plan

During High Fire Danger days in your area, monitor your local media for information on brush fires and be ready to implement your plan. Hot, dry and windy conditions create the perfect environment for a wildfire.

Important Phone Numbers:

Out-of-State Contact: _____ Phone: _____

Work: _____

School: _____

Other: _____

Evacuation Routes: _____

Where to go: _____

Location of Emergency Supply Kit: _____

Notes: _____



California Department of Forestry and Fire Protection

If you have an emergency, call 911

CAL FIRE: 916-653-5123

Web site: <http://www.fire.ca.gov>

READY, SET, GO!



This booklet has been adapted from the original, created by the Ventura County Fire Department.



EXHIBIT 6

Getting Out Alive

Preparing
for wildfire
and
evacuation
in the
Wildland
Urban
Interface



www.rsf-fire.org



Living with Wildfire

The Rancho Santa Fe Fire Protection District contains multiple communities nestled within the wildland urban interface, areas where wildland vegetation is intermixed with structures. As we saw in October 2007, warm climate, dense brush, flammable vegetation, drought conditions, and steep terrain combine for a volatile wildfire equation.

When living within the wildland urban interface, planning ahead for wildfires is a necessity. Fire strikes without warning and moves alarmingly fast, often leaving residents with limited time to gather household belongings and mementos. More and more communities are being developed within wildland-urban interface areas, placing people, pets, and homes at risk of succumbing to wildfire. Every year, communities throughout San Diego County experience the devastation of such disasters, which is not surprising when you consider the fact that 1/3 of all homes in San Diego County are located in the wildland urban interface.

Preparing for wildfires before they happen is your best defense against the flames. This brochure offers tips to help you prepare for potential wildfires to ensure your family and pets make a safe escape from wildfire, including information about developing an emergency plan, what to do if you have to evacuate, and what to do if you are not able to evacuate.



2007 Witch Creek Fire

Before Disaster Strikes

The best way to protect your home from wildfire is to prepare before disaster strikes.

- Remove leaves and other debris from your roof and rain gutters.
- Keep 100 feet of “defensible space” around your home. Trim trees and vegetation away from the exterior of your home, rooftop, and chimney(s).
- Thin out combustible vegetation within 30 feet of roadways and driveways.
- Remove dead, dying, or diseased trees.
- Trim tree branches 10 feet from rooftops, chimneys, and outdoor barbecues.
- Dispose of yard clippings, plant waste, trash, debris, and other combustible materials in an appropriate manner.
- Replenish dead and dying vegetation with fire-resistant trees and plants; do not replant with flammable vegetation.
- Combustible material must be kept at least 10 feet away from propane tanks.
- Firewood should be neatly stacked with a minimum of 30 feet of clearance from structures.
- Private gates must be equipped with an approved fire district gate access switch and/or strobe sensor.



Additionally, all new construction within the fire protection district must be built to ignition-resistant standards and must remain that way. Even when remodeling or putting an addition on to your existing home, be sure your plans match these guidelines:

- Exterior walls must be fire-resistant. Any wood siding must be treated or ignition resistant.
- Eaves must be boxed or constructed of heavy timber and all vents must be screened to prevent fire embers from entering the inside of your home.
- Windows must be dual-pane or tempered glass.
- Chimneys must have spark arrestors with a minimum ½” screen.



- Residential fire sprinkler systems must be maintained.
- Roof must be comprised of Class-A, non-combustible materials like tile, slate, cement, asphalt or metal. No wood shingles.
- Wood fences should be at least 5 feet from your home.
- Trellises, patio covers and other auxiliary structures must be made with non-combustible materials. Minimum timber size requirements are 4” x 6”, and columns must be masonry and stucco or precast concrete. The structure’s covering must remain at least 50% open, or Class-A roof is required.
- Decks should be non-combustible or constructed of heavy timber or fire retardant-treated wood.
- Landscape MUST be fire-resistant and well-maintained.

Evacuation Route Map

Wildfire fatalities most commonly occur when people leave their home too late or are over-taken by fire. If you live in an area that's at high risk for wildfire, it's important for you to plan your evacuation route now, before an emergency situation arises.

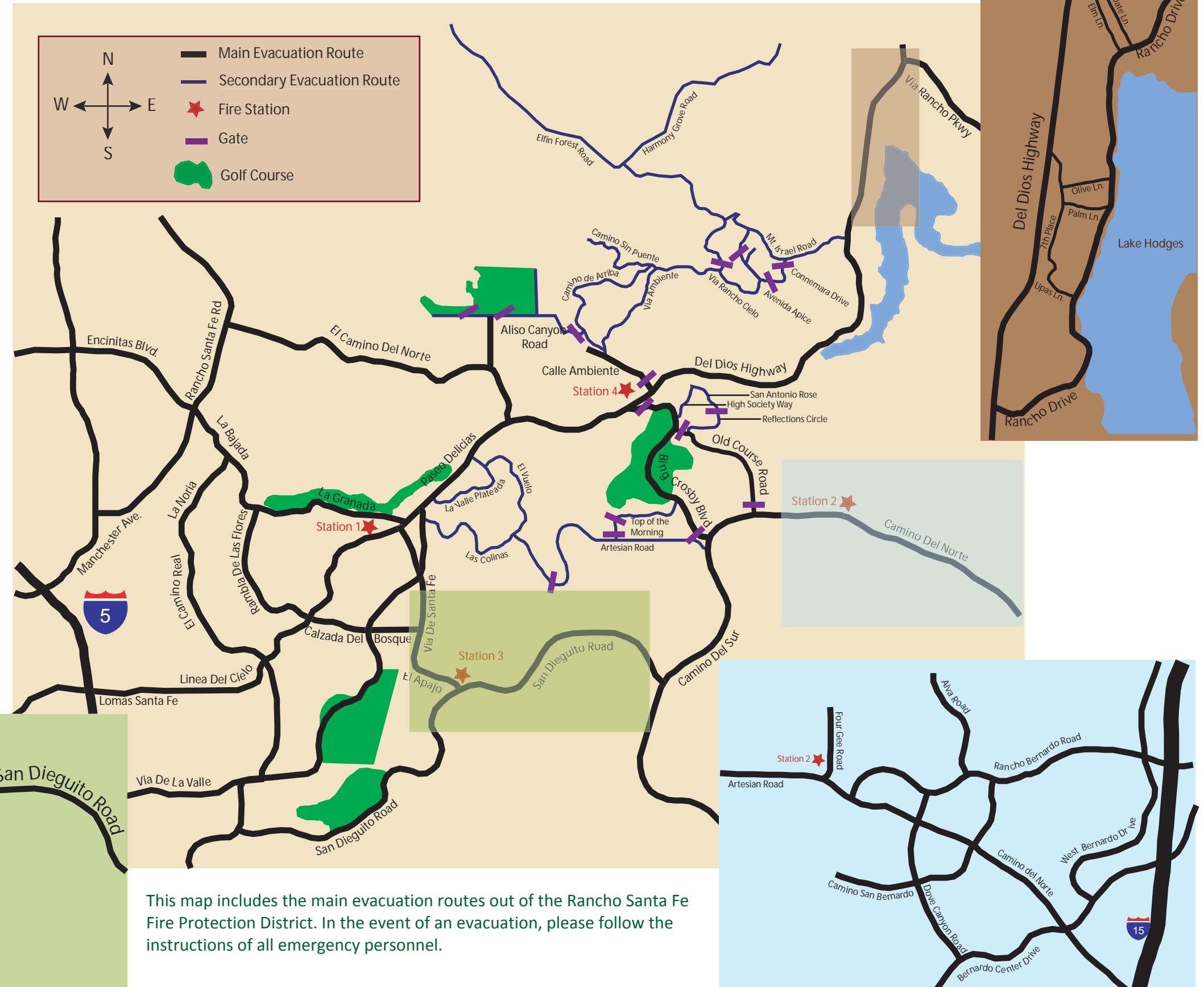
Relocate early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to evacuate, don't hesitate!

"Should I stay or should I go Quiz":

- Are you physically fit to fight spot fires in and around your home for up to 10 hours or more?
- Are you and your family members mentally, physically and emotionally able to cope with the intense smoke, heat, stress and noise of a wildfire while defending your home?
- Can you protect your home while also caring for members of your family, pets, etc.?
- Do you have the necessary resources, training, and properly maintained equipment to effectively fight a fire?
- Does your home have defensible space of at least 100 feet and is it cleared of flammable materials and vegetation?
- Is your home constructed of ignition resistant materials?

If you answered "No" to any of these questions, then plan to evacuate early.

REMEMBER: By evacuating early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.



Develop a Plan

An emergency plan is an essential for a safe and methodical evacuation during a disaster. Prepare, review, and practice your evacuation plan with your family before an emergency situation occurs.

When designing your plan with your family, be sure to include the following:

- Identify a minimum of two (2) main exit routes from your neighborhood. Map out alternative routes in the event main routes are blocked. (There is a map of the immediate area provided on pages 4 and 5).
- Know the location of safe zones (such as golf courses or large open fields) and evacuation centers in the area during wildfire or other disaster situations.
- Make a list of “IMPORTANT ITEMS” that cannot be left behind:
 - Medications, prescriptions and eyeglasses
 - Important documents (e.g., birth certificates, tax records, etc.)
 - Photos, art, jewelry and other important mementos
 - Pets, pet food, leash(es), pet carrier(s)
 - Emergency Supply Kit (Sample checklist enclosed)
 - Cell phones, wallets, and other essential personal items
- Designate a relative or friend as an out-of-area contact through whom family members can relay information. Long-distance phone systems are often operational when local phone communications are overloaded.
- Plan how you will transport your pets. Make sure all your animals are wearing either a license or identification tag. Consider having your animals micro-chipped for identification purposes. PLEASE NOTE: If you own large animals, such as horses and livestock, make arrangements far in advance for their transportation and lodging during an emergency. Train them in advance how to load into trailers quickly and easily. A disaster situation is not the time to trailer-train a horse. DO NOT let horses loose to fend for themselves.
- If you are unable to drive a car, develop a network of neighbors, friends and/or caregivers who can help you prepare for and assist you during a disaster.
- Make a contingency plan should you not be home when wildfire threatens. Make arrangements in advance for people or pets that will be home when you are not. Pre-arrange a family meeting place outside of your neighborhood as well.
- Register your home phone number, cell phone number, and email address with AlertSanDiego, San Diego County’s mass emergency notification system. Registration can be done online at www.AlertSanDiego.org.



2007 Witch Creek Fire

Evacuation

The following suggestions will help in the pre-evacuation and evacuation process:

- Wear cotton or wool long pants, long-sleeve shirts or jackets, gloves and a damp cloth to cover your nose and mouth. Do not wear short-sleeve shirts or synthetic fabrics.
- Back your car into the garage (facing out) keeping the windows closed and keys in the ignition.
- Close the garage door, but leave it unlocked. Disconnect the automatic garage door in case of power failure.
- Place valuable documents, family mementos, pets and other valuables in your car in the garage for a quick departure.
- Move yard furniture, firewood, or other combustible materials away from the exterior of the house or store it in the garage.

- Attach garden hoses to spigots. Place hoses so they can reach any area around your home.
- Fill sinks, bathtubs and buckets with water to serve as extra water reservoirs.
- To eliminate the possibility of sparks blowing into hidden areas within the house, close window shutters if they are fire resistant and cover windows, attic openings, eave vents and sub-floor vents with fire resistant material such as 1/2-inch or thicker plywood.
- If you have one, place an aluminum ladder against the house on the side opposite the approaching fire to help firefighters access your roof quickly.
- Close all windows and doors to prevent sparks from blowing inside. Close all interior doors to slow interior fire spread.
- To make your house more visible in heavy smoke, turn porch and yard lights on and turn on a light in each room of your home.
- Shut off liquefied petroleum gas (LPG) or natural gas valves.
- Most communities within the Rancho Santa Fe Fire Protection District have narrow roads, which can cause traffic congestion leading to panic for those evacuating. Evacuate early.
- You do not need to wait for an evacuation order. If at any time you feel threatened, leave. You may also want to leave early if the evacuation will take a long time, such as if you are evacuating with small children, dependent adults, or large animals.
- If you are told to evacuate, do so immediately. While having your home damaged or destroyed by fire can be devastating, it is not worth risking your life or the lives of firefighters.
- Evacuate in the opposite direction of the fire.
- Do not attempt to pick up children from school or daycare. Staff members are trained to protect your children and will institute proper emergency procedures on site.
- Call your out-of-town contact and let them know you are evacuating and where you are going.
- Once you have left, stay out of the area until authorities permit re-entry. This may take a while as fire and safety personnel have to make sure it is safe and the infrastructure is in place for residents to repopulate the area.

If You Can't Evacuate

If the fire approaches too rapidly for you to be able to safely evacuate from the area, your home is the safest place for you to seek shelter in which to wait out the fire. The following outlines the safest way to shelter-in-place:

- Stay indoors and wait for the wildfire-front to pass, usually within 30 minutes.
- Call your out-of-town emergency contact to let them know you are sheltering-in-place. If local phone lines go down, try using a cellular phone as an alternative, or correspond via email if possible.
- Shelter in rooms at the opposite end of your home from where the fire is approaching. Stay away from the perimeter walls.
- If the interior of your home catches fire, go to a neighbor's home.
- Once the fire front has passed, thoroughly check your home, yard, roof, attic, etc. for fire. Use a garden hose or fire extinguisher to extinguish any spot fires or smoldering embers.



2007 Witch Creek Fire

For further information on Sheltering-in-Place, you may contact the Fire District, 858-756-5971.

Emergency Supply Kit

Emergency supply kits can be used for various disaster situations like wildfires, earthquakes and floods. Supplies should be stored in easy-to-carry crates or backpacks. Your emergency supply kit should be updated twice annually and contain the following items:

- ☐ A 3-day water supply providing one gallon of water per person, per day
- ☐ A 3-day non-perishable food supply including a can opener and kitchen utensils
- ☐ One change of clothing and shoes per person
- ☐ Enough blankets and/or a sleeping bag for each person
- ☐ First aid kit, including family prescriptions and spare eyeglasses
- ☐ Emergency tools and work gloves
- ☐ A battery-powered radio or television and extra batteries
- ☐ Flashlights with extra batteries
- ☐ Matches and/or a lighter kept in a water-proof container
- ☐ Sanitation and hygiene items
- ☐ Special items for infants, seniors and those with disabilities
- ☐ A credit card and cash; personal identification; extra set of car and house keys
- ☐ Extra pet food, leash(es), and enough pet carriers to transport all pets
- ☐ Sunglasses and/or goggles (for high wind and blowing embers)
- ☐ Entertainment (e.g. books, games for the family, or child's favorite toy)
- ☐ Cell phone and charger
- ☐ Computer, hard drive, or laptop (with charger)
- ☐ Prescriptions, medications
- ☐ Important documents, including birth certificates, passports, and insurance records
- ☐ Jewelry
- ☐ Additional items:



EXHIBIT 7

FIRE PROTECTION PLAN
Harmony Grove Village South
APNs: 235-011-06-00, 238-021-08 through 10



Prepared for:

County of San Diego

On behalf of Applicant:

Comstock Homes Management Hg, LLC

321 12th Street, Suite 200

Manhattan Beach, California 92066-5354

Contact: David Kovach

Prepared by:

DUDEK

605 Third Street, Encinitas, California 92024

Contact: Michael Huff, Project Manager

A handwritten signature in black ink, reading "Michael Huff", is positioned above a solid horizontal line.

MARCH 2015

Harmony Grove Village South Fire Protection Plan

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Harmony Grove Village South Fire Protection Plan

1 EXECUTIVE SUMMARY

This Fire Protection Plan (FPP) evaluates the proposed Harmony Grove Village South (HGVS) project, to ensure it does not unnecessarily expose people or structures to fire risks and hazards. The approximately 111-acre project is located in the unincorporated portion of San Diego County in the community of Harmony Grove, approximately 2.5 miles west of Interstate 15 (I-15) and approximately 2.6 miles south of State Route 78 (SR-78). The project site is bounded by Escondido Creek to the north, Country Club Drive to the west, and the Del Dios Highland Preserve to the south. Existing rural residential development is located to the west and to the east. The Harmony Grove Village, a 470 acre residential development is currently under construction to the north.

The HGVS project meets or exceeds all fire and building code requirements except one; the project provides mitigations for secondary access that does not meet the strict definition of the Fire Code. This FPP provides detailed discussion of the secondary access requirements and how the project meets the intent of the code through a layered and redundant fire protection and evacuation system.

Currently, the only access to the project site is provided by Country Club Drive and consists of a sub-standard Arizona crossing that serves sixty existing residents to the west of the HGVS site. HGVS will improve the Arizona crossing to a bridge that exceeds County of San Diego standards. Fire protection will be provided from the new fire station being built in the Harmony Grove Village project to the north that is within 1.2 miles from the most distant portion of HGVS. The project will provide fair-share funding for fire and emergency medical response through participation in a County Service Area (CSA) or through fire assessments and fees, depending on the final fire station jurisdiction. It is anticipated that the new station will be staffed by career personnel provided by the Rancho Santa Fe Fire Protection District (RSFFPD) or the San Diego County Fire Authority (SDCFA). The RSFFPD and the Elfin Forest/Harmony Grove Volunteer Fire Departments have submitted an application to the Local Area Formation Committee (LAFCO) that, if approved, will expand the RSFFPD to cover the project area.

The project includes a mix of up to 457 residential units, limited commercial, private recreational areas, manufactured slopes, landscaped areas, natural-appearing drainages, public trails, and biological open space that does not intermingle within the developed areas. The project would require the construction of on- and off-site infrastructure improvements associated with roads, water, and sewer.

The HGVS property lies within an area statutorily designated State Responsibility Area (SRA) “Very High Fire Hazard Severity Zone (VHFHSZ),” by CAL FIRE and the County of San Diego. The site’s vegetation is primarily non-native, disturbed grasses in the development area

Harmony Grove Village South Fire Protection Plan

with Southern mixed chaparral on the steep slopes at the southern end of the property. Off-site, adjacent areas include chaparral to the south and disturbed/developed areas to the east, west and north. The area, like all of San Diego County, is subject to seasonal weather conditions that can heighten the likelihood of fire ignition and spread; however, considering the site's location, would be expected to result in spotty, potentially fast moving and primarily low- to moderate-intensity wildfire.

2 INTRODUCTION

This FPP has been prepared for the proposed HGVS project in unincorporated San Diego County, California. The purpose of the FPP is to assess the potential impacts resulting from wildland fire hazards and identify the measures necessary to adequately mitigate those impacts. As part of the assessment, this plan has considered the fire risk presented by the site including: property location and topography, geology (soils and slopes), combustible vegetation (fuel types), climatic conditions, fire history and the proposed land use and configuration. This FPP addresses water supply, access (including secondary/emergency access), structural ignitability and ignition resistive building features, fire protection systems and equipment, impacts to existing emergency services, defensible space, and vegetation management. This plan identifies fuel modification/management zones and recommends the types and methods of treatment that will protect this project and its essential infrastructure. In addition, this FPP recommends enhanced fire protection measures that the Homeowner's Association (HOA) and individual property owners will take to reduce the probability of structural ignition throughout the project.

This FPP is consistent with the County Consolidated Fire Code (2014 CCFC and 2014 CFC Ordinance #10337). The 2014 CCFC was certified as a package with the County Building Code by the State Board of Forestry to be consistent with California Code of Regulations, Title 14, Fire Safe Regulations. Since the project is within SRA, Title 14 is applicable, but the certified CCFC is now used in lieu of Title 14.

The purpose of this plan is to generate and memorialize the fire safety requirements of the Fire Authority Having Jurisdiction (FAHJ), namely the SDCFA and RSFFPD upon annexation. Recommendations for effectively mitigating identified impacts are based on site-specific characteristics and incorporate input from the project applicant and SDFCA. This FPP incorporates applicable fire safety regulations and requirements and documents a selection of these regulations that are most pertinent to the Project's unique residential development and location.

2.1 Project Summary

2.1.1 Location

HGVS is located entirely within the unincorporated portion of San Diego County, known as Harmony Grove. The HGVS project site lies within Township 13 south, Range 2 west and Range 3 west in Sections 7, 12, 13, and 18 in the Escondido and Rancho Santa Fe U.S. Geological Survey, 7.5 minute quadrangles. The site is west of the City of Escondido, south of the City of San Marcos and northeast of the community of Rancho Santa Fe (Figure 1). The project is approximately four miles southwest of the intersection of I-15 and SR- 78. The Elfin Forest Preserve is located approximately 0.9 mile to the southwest. The Harmony Grove Village, a

Harmony Grove Village South Fire Protection Plan

Master Planned development, consisting of 468 acres that is being developed by Standard Pacific Corporation and is anticipated to be composed of various residential opportunities, an equestrian center, a fire station, trails, parks and a town square occurs directly north of HGVS.

Figure 2 presents the project's site plan including property boundaries, roads, access points, and building locations. The HGVS project site is located on the following Assessor Parcel Numbers: 235-011-06-00, 238-021-08-00, 238-021-09-00 and 238-021-10-00. The entirety of the property lies within the SRA, VHFHSZ, as statutorily designated by the RSFFPD in cooperation with CAL FIRE. Fire hazard designations are based on topography, vegetation, and weather, amongst other factors with more hazardous sites including steep terrain, unmaintained fuels/vegetation, and wildland urban interface (WUI) locations.

2.1.2 Project Description

The approximately 111-acre HGVS Project site is bounded by Escondido Creek to the north, Country Club Drive to the west, and the Del Dios Highland Preserve to the south. Existing rural residential development is located to the west and to the east. Harmony Grove Village (currently under construction) is located to the north, across from Harmony Grove Road. Primary access to the project site is provided by Harmony Grove Road and Country Club Drive.

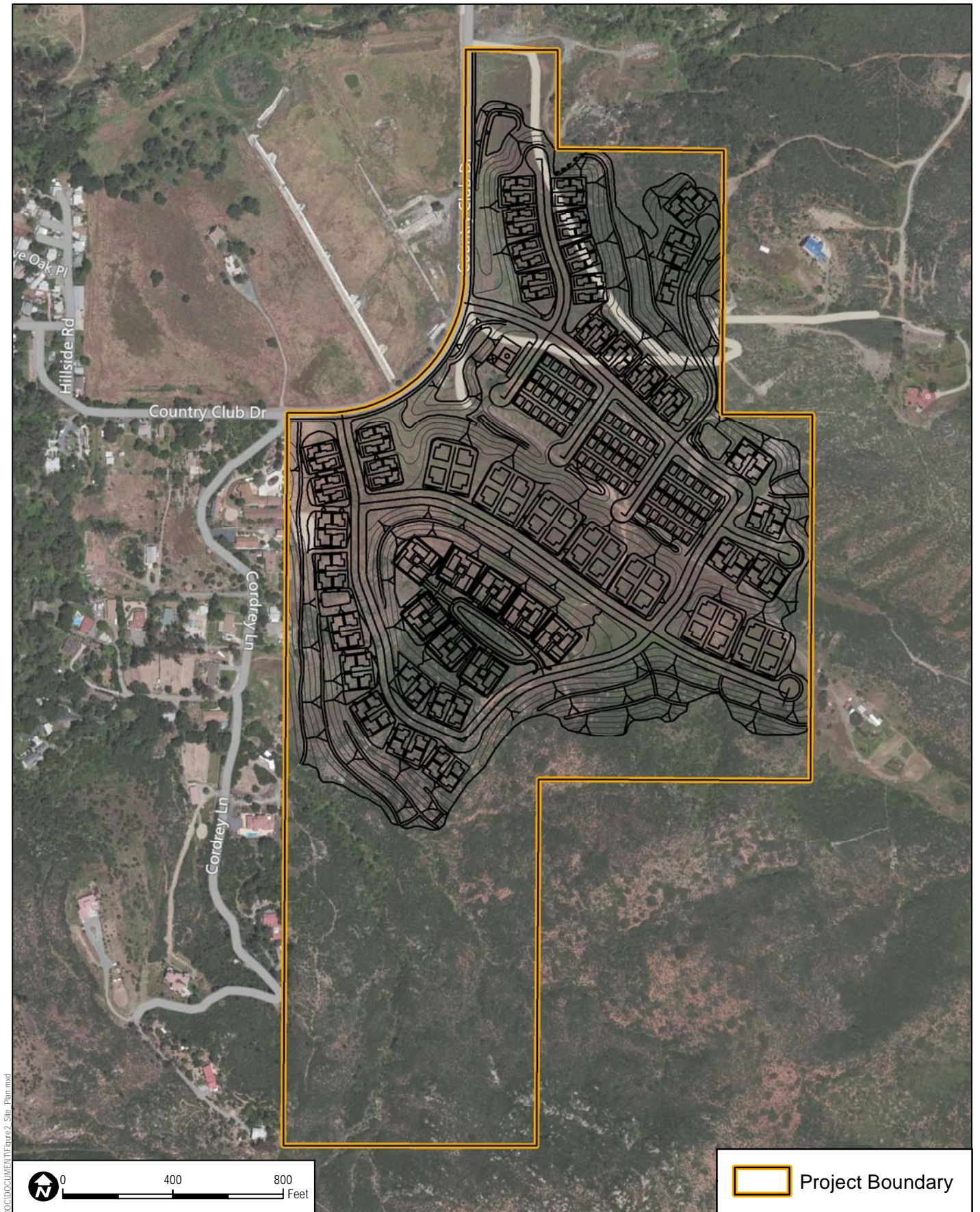
The project proposes:

- A Tentative Map to subdivide the property into a maximum 457 lots;
- A Specific Plan to provide detail on proposed uses;
- A Re-zone from A70 (Limited Agriculture) to S88 (Specific Plan);
- A General Plan Amendment to include the VRTBD (Village Residential) land use designation; and
- A Major Use Permit for an on-site waste water treatment/water reclamation facility.

The project includes a mix of up to 457 residential units, limited commercial, private recreational areas, manufactured slopes, landscaped areas, natural-appearing drainages, public trails, fuel modification, and biological open space. The project would require the construction of on- and off-site infrastructure improvements associated with roads, water, and sewer. Appendix A provides photographs of the site in its current, undeveloped condition.

Harmony Grove Village South Fire Protection Plan

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Harmony Grove Village South Fire Protection Plan

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Harmony Grove Village South Fire Protection Plan

2.1.3 Environmental Setting

Dudek conducted a field assessment of the project site, including on-site and off-site adjacent areas, on September 30, 2014, in order to document existing site conditions and determine potential actions for addressing the protection of proposed structures on the site.

Assessment of the area's topography, natural vegetation and fuel loading, fire history, and general susceptibility to wildfire formed the basis of the site risk assessment. The field tasks included:

- Topographic features documentation
- Vegetation/fuel documentation and measurements
- Existing infrastructure evaluations
- Documentation of the existing condition
- Surrounding land use confirmations
- Necessary fire behavior modeling data collection
- Photograph documentation.

2.1.3.1 Topography

The Harmony Grove Village South project site is an irregularly shaped parcel that includes a relatively flat valley “floor” flanked by more rugged terrain to the south, east and west. The majority of the site is relatively flat with approximately 77 acres ranging between zero and 25% slope. An estimated 33.5 acres are between 25% and 50% slope and there is 1/2 acre of extremely steep hillside that exceeds 50%. All of the slopes drain to the northwest towards Escondido Creek, which meanders through San Elijo Canyon to the southwest of the project site. Elevations on the site range from roughly 580 feet above mean sea level (amsl) in the northwestern portion of the property to just over 840 feet amsl in the southeastern portion of the project site.

2.1.3.2 Fuels

Based on the project's Draft Vegetation Map, (Helix Environmental Planning, 2014), there are 10 vegetation communities and land covers within the project site boundaries: Coast live oak woodland, Coastal Sage-chaparral Transition, Diegan Coastal Sage Scrub, Disturbed Habitat, Eucalyptus Woodland, Granitic Southern Mixed Chaparral, Mafic Southern Mixed Chaparral, Non-native Grassland, Non-native Vegetation, and Urban/Developed. The acreage of each of these vegetation communities or land covers are provided in Table 1 and illustrated in Figure 3.

Harmony Grove Village South Fire Protection Plan

Table 1
Project Site Vegetation Communities and Land Covers

Vegetation Community/Land Cover	Acres
Coast Live Oak Woodland	1.146
Coastal Sage-chaparral Transition	4.479
Diegan Coastal Sage Scrub	10.876
Disturbed Habitat	2.379
Eucalyptus Woodland	0.260
Granitic Southern Mixed Chaparral	32.279
Mafic Southern Mixed Chaparral	14.074
Non-native Grassland	43.547
Non-native Vegetation	0.827
Urban/Developed Land	1.221
Total	111.088

Vegetation communities of concern are those that are more likely to facilitate fire spread that occur adjacent to the proposed development. Three off-site vegetation communities (Coast Live Oak Woodland, Diegan Coastal Sage Scrub, and Southern Mixed Chaparral) were identified as potentially facilitating fire spread toward project residences. The following descriptions provide an overview of these three vegetation types.

Coast Live Oak Woodland

This woodland is dominated by Coast live oak (*Quercus agrifolia*), an evergreen oak that reaches 10-25 m in height. The shrub layer is poorly developed, but may include toyon (*Heteromeles arbutifolia*), *Ribes* spp., or laurel sumac (*Rhus laurina*). The ground cover component is continuous and dominated by annual grasses and several other introduced taxa. The Coast live oak woodland dominates the riparian corridor to the west of the site. The oak trees have experienced a recent fire (2014 Cocos Fire) and have many dead leaves in the canopies. Trunks are also blackened by the fire. Many of the trees are expected to recover while some will be lost.

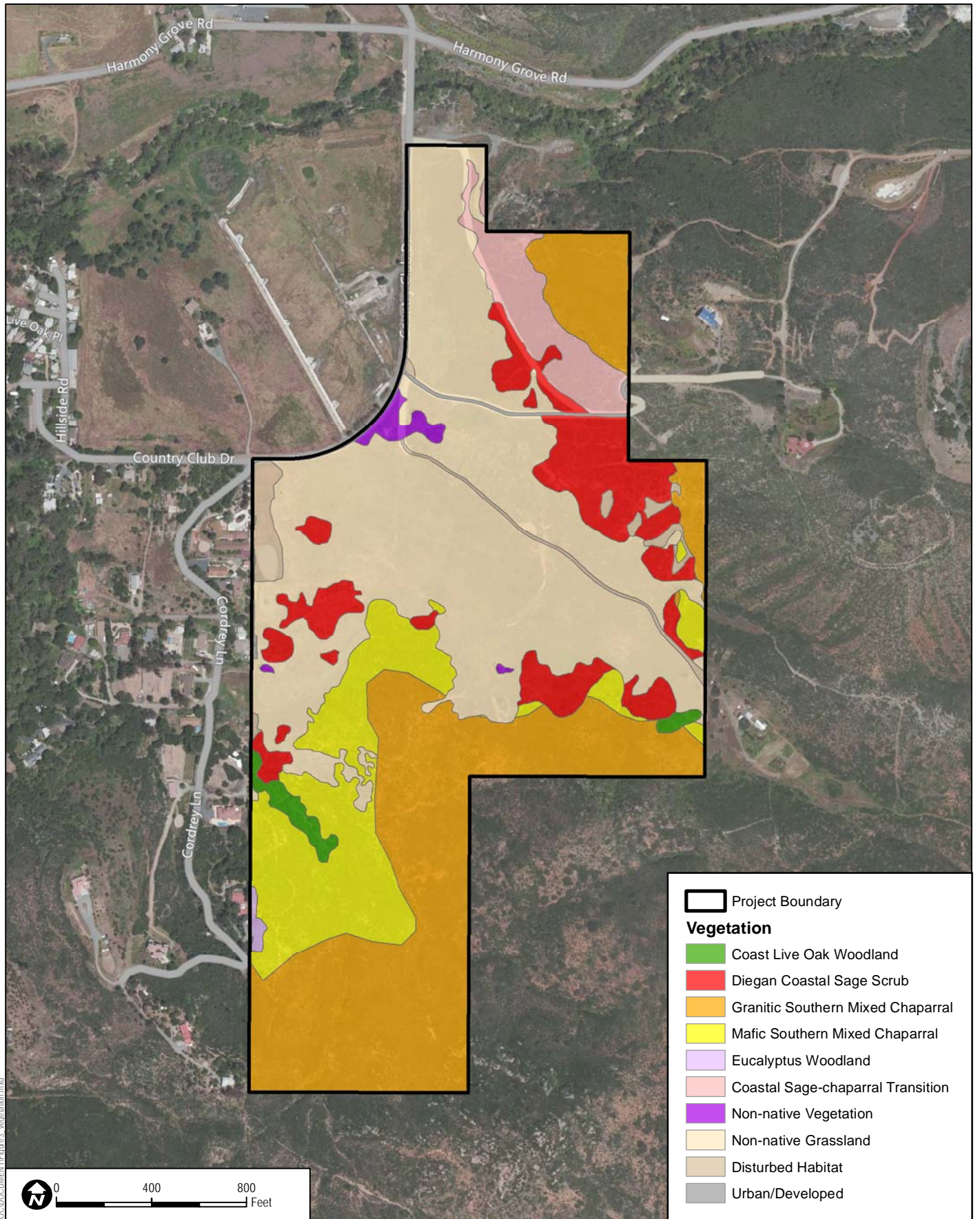


FIGURE 3
Project Site Vegetation

Harmony Grove Village South Fire Protection Plan

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Harmony Grove Village South Fire Protection Plan

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is one of two major shrub types in southern California, occupying xeric sites characterized by shallow soils. Coastal sage scrub is dominated by drought-deciduous shrub species with relatively shallow root systems and open canopies. This vegetation community often contains a substantial herbaceous component and leaf litter layer. Dominant species within Diegan coastal sage scrub on site include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and black sage (*Salvia mellifera*). The height of the shrub layer is currently 2–3 feet. This vegetation type had a light build-up of grasses or forbs underneath the shrub canopies. Diegan coastal sage scrub habitat occurs to the east and southeast of the proposed development.

Southern Mixed Chaparral

Southern mixed chaparral is the most abundant vegetation type on the slopes to the south and west of the project site. Southern mixed chaparral is composed of broad-leaved sclerophyllous shrubs that can reach heights of 12 feet. The shrubs are generally deep rooted, with well-developed soil litter layer, and high canopy coverage. The composition of the southern mixed chaparral varies with the topography and exposure across the site. Dominant plant species in this vegetation community include chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), Wart-stemmed ceanothus (*Ceanothus verrucosus* Nutt.), black sage, and laurel sumac. The vegetative shrubs have a high percentage of dead woody material (roughly 50% to 60%) in shrub canopy due to drought condition.

2.1.3.3 Fuel Model Assignments

The area proposed for development will be converted to a lower flammability, ignition resistant landscape than current conditions. This conversion will include removal of primarily non-native grasses and construction of roads, structures, and irrigated, managed landscape vegetation with the project's construction. Areas outside of the proposed development footprint, such as those within the biological preserve areas and the furthest reaches of fuel modification areas in the thinning zone, can be classified primarily as a mix of Diegan coastal sage scrub, Southern mixed chaparral, and Coastal live oak riparian forest. Table 1 provides a summary of the vegetation and fuel types observed on site, as well as corresponding fuel model assignments for fire behavior modeling conducted for this project, as described in Chapter 3. Figure 3 presents vegetation distribution on the site. Appendix A provides photographs of the site and its vegetative fuels.

Harmony Grove Village South Fire Protection Plan

Table 2
Observed Off-Site Vegetative Fuels

Vegetation Type	Location	Fuel Model Assignment
Diegan coastal sage scrub	On west facing slopes to east of project site.	SCAL 18
Southern Mixed Chaparral	On all slopes surrounding project site. Most abundant vegetative type for Project area.	FM 4
Coast Live oak riparian forest	Oak forest occurs within Escondido Creek, just west of Project area.	FM 9

2.1.3.4 Fuel Loads

The vegetation described above translates to fuel models used for fire behavior modeling, discussed in Chapter 3 of this FPP. Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (leaf size, branching patterns), and overall fuel loading. For example, the native shrub species that compose the two vegetation types on site are considered to exhibit higher potential hazard based on such criteria.

Fuel Loading is important because the intensity of fire tends to increase with the weight or volume of the fuels burned (Biswell 1989). Fuel loading is measured in tons of fuel available per acre. All vegetative fuels have a continuous fuel bed comprised of live and dead woody material. The fuel bed heights ranged from 3-12 feet high. Fine fuel loading in coastal sage scrub is estimated to be 4 to 5 tons/acre, while that in Southern Mixed Chaparral is estimated at 7-10 tons/acre. Fine fuel loading (primarily leaf litter) for oak riparian areas is slightly lower than the sage scrub, estimated at 3.5 tons/acre.

2.1.3.5 Fire History

Fire history is an important component of a site-specific FPP. Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, amongst others. Appendix B illustrates fire history for the Harmony Grove Village South project vicinity. As presented, there have been numerous fires recorded by fire agencies in the direct vicinity of the project site, primarily associated with the open space preserves (Del Dios Highlands Preserve and Park and Elfin Forest Recreational Reserve) to the south of the Project area. One recorded fire has burned on the project site, occurring in 1997 (Del Dios Fire) and the Cocos Fire (2014) burned up to the northwest edge of the property. The average fire return interval for fires burning within 3 miles of the project site is 7 years. Recorded wildfires within 3 miles of the Project range from 28 acres to 162,070 (Witch Fire)

Harmony Grove Village South Fire Protection Plan

acres. However, the average fire size is 1,519 acres (not including the Witch Fire, 1943 Un-named Fire or fires smaller than 10 acres). As suggested by the data, a significant fire history exists in the vicinity of the project site but most wildfires are contained by initial or extended attack. Consistent with results throughout large portions of Southern California, Santa Ana wind driven fires present the highest risk of non-containment by initial or extended attack and the occurrence of a major incident. Fire history data was obtained from CAL FIRE's Fire and Resource Assessment Program (FRAP 2014) database.

Table 3
Fire History within Three Miles of the Project Site

Fire Year*	Fire Name	Interval (years)	Total Area Burned (acres)
1919	Un-named	N/A	6,693
1943	Un-named	24	40,248
1980	Elfin	37	47
1981	Outside Origin #2	1	4,325
1984	Questhaven	3	29
1985	Israel	1	28
1986	Harmony	1	41
1987	Del Dios	1	217
1988	Hodges #2	1	150
1988	Del Dios #2	0	37
1988	Outside Origin #11	0	247
1989	Harmony	1	143
1990	Paint	1	2,761
1994	Questhaven	4	65
1996	Harmony	2	79
1996	Harmony	0	9,359
1997	Del Dios	1	1073
2007	Coronado Hills	10	59
2007	Witch	0	162,070
2014	Cocos	7	1,995

¹ *FRAP 2014, Cocos Fire perimeter and information obtained from Cal Fire incident website.

Based on fire history, wildfire risk for the project site is associated primarily with wind-driven fires originating near Lake Hodges (such as along Del Dios Highway) and burning or spotting onto the site from the south. Although a fire approaching from the west during more typical on-shore weather patterns is possible, it would typically occur with higher humidity and fuel moisture levels and lower average wind speed, resulting in a more manageable fire.

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2.1.3.6 Climate

North San Diego County and the project area are influenced by the Pacific Ocean and are frequently under the influence of a seasonal, migratory subtropical high pressure cell known as the “Pacific High.” Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. The average high temperature for the project area is approximately 72°F, with daily highs in the summer and early fall months (July–October) exceeding 95°F. Precipitation typically occurs between December and March with average rainfall of 13 inches.

The prevailing wind pattern is from the west (on-shore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west–southwest (sea) and at night winds are from the northeast (land), averaging 2 miles per hour (mph). During the summer season, the diurnal winds may average slightly higher (approximately 16 mph) than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds, which affect the HGVS site and the region.

Typically the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires in San Diego County exceeded 30 mph and may exceed 50 mph during extreme conditions. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are warm winds that flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Santa Ana winds generally coincide with the regional drought period and the period of highest fire danger.

2.1.3.7 Current Land Use

The HGVS site is currently undeveloped. The proposed development portions of the property primarily consist of disturbed ground, non-native grasses and invasive plants. There are two structure foundations on the site that will be removed during grading of the development. Much of the site is now traversable on graded, dirt roads. Additionally, a dirt road provides access through the site to a single residential property to the south of the project boundary.

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2.1.3.8 Proposed Land Use

The HGVS project proposes a mix of up to 457 residential units, limited commercial, private recreational areas, manufactured slopes, landscaped areas, natural-appearing drainages, public trails, and biological open space. The project would require the construction of on- and off-site infrastructure improvements associated with roads, water, and sewer.

The Project proposes:

- A Tentative Map to subdivide the property into a maximum 457 lots;
- A Specific Plan to provide detail on proposed uses;
- A Rezone from A70 (Limited Agriculture) to S88 (Specific Plan);
- A General Plan Amendment to include the VRTBD (Village Residential) land use designation; and
- A Major Use Permit for an on-site waste water treatment/water reclamation facility.

The proposed land use improvements described above would be completed according to the San Diego County Consolidated Fire Code and County Building Code in effect at the time of building plan submittal and would include ignition-resistive construction, interior sprinklers, required fire flow, and a designated fuel modification area, among other requirements as described further in this FPP.

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3 DETERMINATION OF PROJECT EFFECTS

FPPs provide an evaluation of the adverse environmental effects a proposed project may have from wildland fire. The FPP must provide mitigation for identified impacts to ensure that development projects do not unnecessarily expose people or structures to a significant loss, injury or death involving wildland fires. Significance is determined by answering the following guidelines:

Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The wildland fire risk in the vicinity of the Project site has been analyzed and it has been determined that wildfires may occur in wildland areas to the west, east, south, and southwest of the project site, but would not be significantly increased in frequency, duration, or size with the construction of the project. The developing Harmony Grove project to the north has created a large low-fire risk area in alignment with north/northeast wind directions, reducing the fire threat at the Project site. The existing site includes numerous potential fire issues including unmaintained, non-native vegetation and limited access for approximately 60 residents to the west of HGVS. The Project would include conversion of fuels to developed land with designated landscaping and fuel modification areas and highly ignition resistant structures. As such, the site will be largely converted from readily ignited fuels to ignition resistant landscape.

The types of potential ignition sources that currently exist in the area include vehicles, roadways, illegal recreation users, and off-site residential neighborhoods. The project would introduce potential ignition sources, but would also include conversion of ignitable fuels to lower flammability landscape and include better access throughout the site, managed and maintained landscapes, more eyes and ears on the ground, and generally a reduction in the receptiveness of the area's landscape to ignition. In addition, the Project would enhance access (both ingress and egress) through a multi-tiered approach. Fires from off-site would not have continuous fuels across this site and would therefore be expected to burn around and/or over the site via spotting. Burning vegetation embers may land on Project structures, but are not likely to result in ignition based on ember decay rates that would not impact the types of non-combustible and ignition resistant materials that will be used on site.

The Project would comply with applicable fire and building codes and would include a layered fire protection system designed to current codes and inclusive of site-specific measures that will result in a Project that is less susceptible to wildfire than surrounding landscapes and that would facilitate firefighter and medical aid response as well as project resident evacuation in a wildfire emergency. Given the anticipated maximum fuel loading for the natural areas off site, resulting fire behavior modeling results, which closely mimic reported Fire behavior from the most recent

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fire in the area, the 2014 Cocos Fire, combined with the required ignition resistance construction the risk of wildfire damage to the project site's structures and its residents is considered low.

Would the project result in inadequate emergency access?

The HGVS is requesting an exception to the 2014 San Diego County Consolidated Fire Code regarding maximum dead end road lengths. The project is requesting a General Plan amendment to re-zone the area into parcels that are less than 1 acre in size, resulting in an allowed maximum dead-end road length of 800 feet. The dead-end road that leads to the most distant structure on HGVS measures about 1.3 miles to the intersection of Harmony Grove and Country Club Drive, the first opportunity to travel in at least two separate directions. This request for modification is based on topographical, geological, and environmental conditions as well as infeasibility of attaining necessary easements for a secondary access that make meeting the regulation unattainable. The project has developed an alternative approach for secondary access that meets the intent of the code through the implementation of a list of specifically developed measures and features (detailed in Section 5.2.1.2 of this FPP). These measures and features provide the ability for the fire authority having jurisdiction to make findings that the intent of the code has been met.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

The project will be served by the not-yet-constructed, but approved fire station located within the developing Harmony Grove Project which will be staffed by SDCFA or RSFPD. The new station will be less than 1.2 miles from the site with an estimated travel time of less than three minutes to the most distant on-site structure. HGVS would receive very fast travel time from this fire station and can also be largely covered by less than 5 minute travel time by existing Escondido Fire Station #6. Truck coverage from Escondido Station #1 is within 8 minutes travel throughout the HGVS project.

These resources could be provided through automatic and mutual aid agreements, but will depend on the final configuration of the new fire station and which fire agency is providing operation. The following list depicts the closest fire departments and their respective travel times to HGVS.

- The proximity to multiple fire stations ensures firefighters will be able to respond in a timely manner and provide resources in the event of simultaneous incidents. The proximity to career fire departments with multiple stations and resources available within

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County standards is critical to approving a project that is requesting an exception for secondary access. Further, NFPA 1710, sec. 5.7.6.2.1 requires the fire department to have enough firefighters to initiate a direct wildland attack within the first 10 minutes, as well as providing an incident commander and two firefighters on attack lines. As stated previously this project exceeds the minimal NFPA acceptable response standard with at least 4 career fire stations and a Battalion Chief within 10 minutes travel. NFPA 1141 was used to determine the following travel times (include the ISO travel time formula).

1. The approved fire station within Harmony Grove is directly north of HGVS. The location is 1.3 miles total distance (to most distant structure) with a calculated travel time of 2.8 minutes.
2. Escondido Fire Station # 6 is located at 1735 Del Dios Highway and is 2.8 miles away with a travel time of just over 5 minutes.
3. Escondido Station #1 is located at 310 North Quince Street and is 4.2 miles away and has a travel time of 7.9 minutes.
4. Elfin Forest / Harmony Grove Fire Station is located at 20223 Elfin Forest Road and is just under 5 miles away with a travel time of 9.1 minutes.

Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The project will be served by Rincon del Diablo Municipal Water District (RDDMWD) and sufficient water supplies will be available to serve the project from existing entitlements and resources. The Rincon Water District requires new development to meet a dual 2500 gpm fire flow in the District for a 5,000 gpm. The pressures in the HGVS development will remain above 20 psi when meeting the fire requirements for the Rincon District. Appendix H includes the Project's Facility Water Service Letter.

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4 ANTICIPATED FIRE BEHAVIOR

4.1 Fire Behavior Modeling

Following field data collection efforts and available data analysis, fire behavior modeling was conducted to document the type and intensity of fire that would be expected on this site given characteristic site features such as topography, vegetation, and weather. Results are provided below and a more detailed presentation of the modeling inputs and results is provided in Appendix B.

4.1.1 Fuel Models

Fuel Models are simply tools to help fire experts realistically estimate fire behavior for a vegetation type. Fuel models are selected by their vegetation type; fuel stratum most likely to carry the fire; depth and compactness of the fuels; and percent of dead branches or foliage in shrub canopy. Fire behavior modeling was conducted for vegetative types that surround the proposed development. The vegetation types are represented primarily by three fuel models as shown in Table 1. Other fuel models may exist, but not at quantities that significantly influence fire behavior in and around the proposed development. Fuel models were selected from custom and Standard Fire Behavior Fuel Models: a Comprehensive Set for Use with Rothermel's Surface Fire Spread Model (Scott and Burgan 2005).

4.1.2 Fuel Model Output Results

Focused fire behavior modeling utilizing BehavePlus (v. 5.0.5) was conducted for the project site. A more detailed discussion of the BehavePlus analysis, including weather input variables, is presented in Appendix B. Fuel model typing was completed in the field concurrent with site hazard evaluations. Based on field analysis, four different fire scenarios were evaluated for the project site.

- **Scenario 1:** Peak fire weather with off-shore, Santa Ana winds and fire burning in southern mixed chaparral and coastal sage scrub along northeastern and eastern portions of project site.
- **Scenario 2:** Peak fire weather with off-shore, Santa Ana winds and fire burning in a canyon vegetated with southern mixed chaparral and coastal sage scrub to the southeast of project site.
- **Scenario 3:** Summer fire weather with on-shore winds and fire burning in the southern mixed chaparral along southwestern portion of project site.

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- **Scenario 4:** Summer fire weather with on-shore winds and fire burning in the southern mixed chaparral and Coast live oak riparian forest along the western portion of the project site.

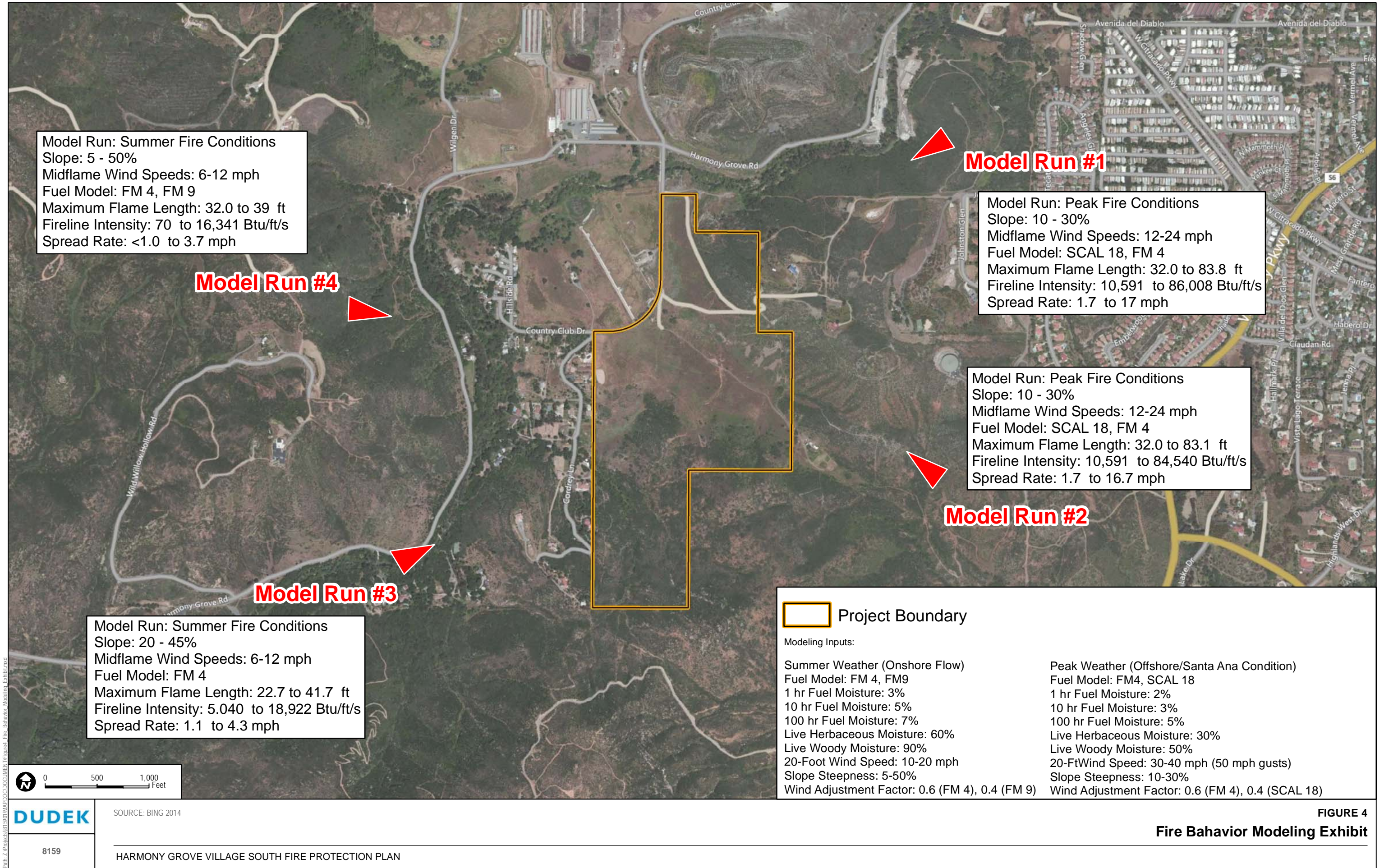
The unique terrain and fuel models used for BehavePlus modeling for the Harmony Grove Village South site are presented in Table 3, and the results of modeling efforts are provided in Table 4. Locations of BehavePlus model runs are presented graphically in Figure 4. Based on the BehavePlus analysis, worst-case fire behavior is expected in chaparral-coastal sage scrub fuel beds along the northeast, east, and southeast of the proposed development area under Peak weather conditions (represented by Scenarios 1 and 2). Under such conditions, expected surface flame lengths reach 84 feet during peak weather conditions with wind speeds of 40+ mph. Under this scenario, fireline intensities reach 86,008 BTU/feet/second with moderate to fast spread rates ranging from 2.0 to 17.0 mph. Fires burning from the west or southwest of the proposed development area and pushed by on-shore winds (Summer weather) exhibit less severe fire behavior, with flame lengths reaching 42 feet, fireline intensities reaching 18,922 BTU/feet/second and a spread rate reaching 4.3 mph in dense chaparral-Coast live oak riparian fuel beds.

Table 4
HGVS Fire Behavior Model Variables

Scenario	Weather	Fuel Model(s)	Slope	Aspect
1	Peak(Off-shore)	Chaparral-sage scrub(FM 4, SCAL 18)	10-30%	North and West
2	Peak (Off-shore)	Chaparral-sage scrub (FM 4, SCAL 18))	10-30%	North and Southwest
3	Summer (On-shore)	Chaparral (FM 4)	20-45%	North and Northeast
4	Summer (On-shore)	Oak riparian-sage scrub (FM 4, FM 9)	5-50%	East

Table 5
HGVS BehavePlus Fire Behavior Model Results

Model Runs (Scenario)	Flame Length (feet)	Fireline Intensity (Btu/ft/s)	Surface Rate of Spread (mph)
1	32.0 to 83.8	10,591 to 86,008	1.7 to 17.0
2	32.0 to 83.1	10,591 to 84, 540	1.7 to 16.7
3	22.7 to 41.7	5,040 to 18,922	1.1 to 4.3
4	3.2 to 39.0	70 to 16, 341	<1.0 to 3.7



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The results presented in Table 4 depict values based on inputs to the BehavePlus software and are not intended to capture changing fire behavior as it moves across a landscape. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis. For planning purposes, the averaged worst-case fire behavior is the most useful information for conservative fuel modification design. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

Based on the results of fire behavior modeling, a typical fire in the Project vicinity will be a sage scrub-chaparral fueled fire that moves quickly, burning with moderate to high intensity. The fire is anticipated to be a wind-driven fire from the east or north during the fall. Flame lengths in the fuels could reach 84 feet with spread rates reaching approximately 17 mph during fall conditions. A typical cause may be related to structure fires in the neighborhoods to the north and east or roadways (tossed cigarette, car fire, or electrical powerline arching).

4.2 On-Site Fire Risk Assessment

Given the climatic, vegetative, WUI, and topographic characteristics and fire history of the area, the project site, once developed, is determined to be subject to occasional off-site wildfires. Potential for off-site wildfire encroaching on, or showering embers on the site is considered moderate to high, but risk of ignition from such encroachments or ember showers is considered low based on the type of construction and fire protection features that will be provided for the structures.

Wildland fire from the east, south, or southwest is possible given the existence of open space reserve lands and ignition sources. The most significant wildfire threat currently is considered to be during Santa Ana conditions with wind-driven wildfire from the northeast/east. However, the Santa Ana threat is considered minimal post-development because there is a lack of wildland fuels to the northeast/east, which is currently being developed for the Harmony Grove Village project. The developed areas of the City of Escondido are located to the east. The most significant threat for this project would be a fire started west or southwest of the site in heavy native vegetation. This type of fire would also have the potential to produce embers and is subject to unstable wind patterns, resulting in eddies and wind/terrain assisted fire runs up side canyons and “chimneys¹.”

¹ Steep valleys, chutes, drainages, and similar terrain are sometimes referred to as chimneys.

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The following description summarizes details regarding the site's fire environment and general risk from wildland fire.

- This property is within an area subject to occasional weather extremes that may facilitate wildfire ignition and spread;
- Terrain to the south and west of the project may facilitate the spread of fire due to steep, vegetated slopes.
- The predominant fuel type surrounding the project site is southern mixed chaparral. Fuel loading will be different for north vs. south facing slopes. The fuel load for a southern aspect at a "climax" condition (at community maturity) is considered lighter than on north-facing adjacent slopes based on the southern exposure, which results in hotter and drier conditions and less vegetation growth. Southern facing slopes also become more prone to ignition due to the same factors;
- Santa Ana winds coinciding with the late fall vegetation drying have resulted in some of the largest and most severe wildland fires (e.g., 2007 Witch Fire) in San Diego County and California. Fire history indicates wildfire has occurred on and in the vicinity of the project several times, as described in section 1.1.3.5.

5 ANALYSIS OF PROJECT EFFECTS

5.1 Adequate Emergency Services

5.1.1 Emergency Response

The project site is located within Elfin Forest/Harmony Grove Volunteer Fire Department and SRA. The RSFPD and the Elfin Forest/Harmony Grove Volunteer Fire Department have submitted a request to the LAFCO that would allow the new fire station that is being built by Harmony Grove Village to be staffed by RSFFPD. Emergency ambulance service for CSA 17 is outsourced to a private vendor. The proposed new RSFFPD Station is less than 1.3 miles to every structure proposed on the HGVS site and the engine can respond within three minutes travel time, which is within the County's and RSFFPD's response travel time standard of 5 minutes. Further, the requirements described in this FPP are intended to aid firefighting personnel and minimize the demand placed on the existing emergency service system. Appendix D provides the Project Facility Availability Form for Fire.

Generally, in San Diego County each agency is responsible for structural fire protection and CalFire typically provides wildland fire protection within their area of responsibility. However, mutual aid agreements enable non-lead fire agencies to respond to fire emergencies outside their district boundaries. In the Project area, fire agencies cooperate on a statewide master mutual aid agreement for wildland fires and there are mutual aid agreements in place with neighboring fire agencies (north zone agencies and San Diego City) and typically include interdependencies that exist among the region's fire protection agencies for structural and medical responses, but are primarily associated with the peripheral "edges" of each agency's boundary. These agreements are voluntary, as no local governmental agency can exert authority over another.

Table 6 presents a summary of the location, equipment, staffing levels, maximum travel distance, and estimated travel time for the nearby stations that would respond to a fire or medical emergency at the HGVS project. Travel distances are derived from SANGIS Geographic Information System (GIS) road data while travel times are calculated using nationally recognized National Fire Protection Association (NFPA) 1710 and Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard.

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Table 6
Summary of HGVS Responding Fire Stations

Station	Location	Equipment	Staffing	Maximum Travel Distance*	Travel Time**
Escondido FD Station 1	310 North Quince Escondido, California 92029	Paramedic Engine Truck Company Brush Engine Ambulance	27	4.24	7 min 52 sec
Escondido FD Station 6	1735 Del Dios Hwy Escondido, California 92029	Type 1 Engine Brush Engine Ambulance	15	2.76 miles	5 min 21 sec
Elfin Forest/Harmony Grove	20223 Elfin Forest Rd. Elfin Forest, California 92029	2- Type 1 Engines 2-Brush Engines BLS Ambulance	9	4.97 miles	9 min 6 sec
New Harmony Grove Station	Country Club Dr. Escondido, California 92029	TBD	TBD	1.28 miles.	2 min 50 sec

* Distance measured to most remote portion of project site.

** Assumes travel to the primary project's furthest structure in the southeast, and application of the ISO formula, $T=0.65+1.7D$ (T = time and D = distance). The ISO response travel time formula discounts speed for intersections, vehicle deceleration and acceleration, and does not include turnout time.

The San Diego County General Plan utilizes a 5 minute response time goal for urban areas and up to a 20 minute or more response time for rural areas. The 5 minutes is for travel time and is based on the time typically involved in a room fire reaching the point of “flashover” where control is very difficult and the critical time following a heart attack or stroke for medical intervention. From a fire perspective, the ignition resistant features and interior sprinklers provided the project's residences will effectively minimize fires and extend the occurrence of flashover. Sprinklers have proven very effective at limiting interior fires to the room of origin, and by doing so, extending the time needed for firefighter intervention. There is no mitigation for medical emergencies in this area. The project is well within these critical response times. Travel time to the HGVS site for the first responding engine from the new station to the most remote area of the project is within 3 minutes. Secondary response would arrive within 5 to 5.5 minutes from Escondido Station 6.

5.1.1.1 Emergency Service Level and Capacity

Using San Diego County fire agencies' calculated 82 annual calls per 1,000 population, the project's estimated 1,410 residents (calculated based on 3.12 persons per dwelling; SANDAG 2013), would generate up to 115 calls per year (0.3 calls per day), most of which would be expected to be medical-related calls, consistent with typical emergency call statistics. These estimates are likely overly conservative due to the per capita call factors, which are based on an average of all demographics and sociological populations, including dense, urban areas which,

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on average, result in higher call volumes. A development like Harmony Grove Village South would typically include a demographic that results in fewer calls, per capita, resulting in an overly conservative estimate. Populations associated with Harmony Grove Village and other surrounding neighborhoods would be expected to generate similar per capita call volumes. The station would not be considered a busy station until it averaged a call load of up to 7 to 10 calls per day. The project's contribution of 0.3 calls per day is considered insignificant.

5.2 Buildings, Infrastructure and Defensible Space

The County Consolidated Fire Code and Building Code, in addition to RSFFPD Ordinances should they take jurisdiction, govern the building, infrastructure, and defensible space requirements detailed in this FPP. The project will meet or exceed applicable codes or will provide alternative materials and/or methods acceptable to the fire authority having jurisdiction (secondary access/dead end road length). The following summaries highlight important fire protection features.

Note: all underground utilities, hydrants, water mains, curbs, gutters, and sidewalks will be installed and the drive surface shall be approved prior to combustibles being brought on site. This may be accomplished in a phased manner corresponding to the construction phasing.

Note: Sec. 505.5 of the San DiegoCCFC, Response map updates requires any new development which necessitates updating emergency response maps due to new structures, hydrants, roadways or similar features shall be required to provide map updates in a format compatible with current department mapping services and shall be charged a reasonable fee for updating all response maps. At a minimum, the map updates shall be provided in PDF or a CAD format approved by the FAHJ.

5.2.1 Fire Access

5.2.1.1 Primary

The primary project access for HGVS will be via a widened Country Club Drive that provides three travel lanes. This includes a three lane wide bridge constructed over Escondido Creek that also includes separated horse and pedestrian pathways.

5.2.1.2 Secondary/Emergency

The feasibility of secondary access south, east and west of the project site has been explored, and continues to be explored, with both County staff and RSFFPD. There are two options for secondary access. The first route would be to extend Country Club Drive across Escondido Creek to Harmony Grove Road at a point west of the HGVS Project, where travel can be

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provided in two directions. The second route would require improving a privately owned road that connects with Johnston Road and eventually intersects with Citracado Parkway to the east of the HGVS Project. However, extensive analysis has determined that both of these secondary access routes are infeasible. Due to extremely steep terrain, environmental and biological habitat issues, and privately held property where easements cannot be obtained, there is not a secondary access road solution that can meet the strict definition of the code.

HGVS is effectively an extension of the Harmony Grove Village (HGV), which is located immediately contiguous (west and north) of HGVS and is currently under construction. HGV includes conversion of a large portion of the valley (project area is 500 acres and 742 homes) to low flammability, urban landscapes and forms a fire break for HGVS as well as providing multiple fire safe evacuation routes and potential temporary refuge areas for HGVS residents.

Secondary access to the east or west of HGVS is being explored, but initial analysis indicates that either potential route is constrained by extreme terrain, fuels, significant biological habitat/environmental concerns, and/or unwilling property owners. Because secondary access is likely infeasible, the project's road system technically exceeds the code with regards to dead end road lengths.

Harmony Grove Road and Country Club Drive are both 24 foot wide, two lane roadways. Roads associated with the HGV project to the north will be at least to the same widths. All roads will be paved with an all-weather road surface.

The following recommendations address findings and mitigation for secondary road access for 2014 Consolidated County Fire Code Sections 503.1.2 – Additional Access and 503.1.3 dead-end roads. These findings will meet and exceed the General Plan goals and policies.

Findings and Mitigation Conclusion

The findings and mitigation listed below are considered to provide the fire code official the authority to grant a modification for this project. The basis for the modification is based on the fact that meeting the strict letter of the code for Sections 503.1.2 and 503.1.3, is impracticable. The findings and modifications recommended are in compliance with the intent and purpose of the code. Furthermore, such modification does not lessen health, life, and fire safety requirements.

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Summary of Findings and Mitigation for this Project

Building and Site Design

The Project, through this FPP, will provide alternative fire protection measures that are site specific and meet the intent of the code, as summarized in the following list:

1. **Availability of Alternative Evacuation Route.** The existing access for 3 to 4 residences crosses the HGVS site (Appendix E). Access for these residences will continue to be provided through the HGVS site after development, but via improved, code conforming roadways. The existing road does not meet the fire code, varying in width, surface, and grade. However, this road is accessible by typical passenger vehicles and does connect with Johnston Road to the east. Therefore, even though the road does not provide code-conforming secondary access, it would be available in an emergency situation that required moving people to the east and the primary access route (Country Club Drive) was not available.
2. **Country Club Drive Designed To Include Three, 12-Foot Travel Lanes.** Country Club Drive would be widened from its intersection with Harmony Grove Road to the southernmost HGVS project entrance to three 12 foot wide travel lanes (Appendix E) which would compensate for lack of secondary access by providing additional capacity for evacuation. The project's traffic engineer states that each lane can effectively handle 1,900 vehicles per hour. There are roughly 60 existing residential units that rely on Country Club Drive as their only means of ingress/egress. With the maximum unit site plan for HGVS, an additional 457 residences would be added. If a conservative estimate of four cars per household is used (the average is likely closer to 2 vehicles), there would be a total of approximately 1,828 vehicles seeking egress, assuming worst case. Therefore, with one lane, all existing and proposed residences could evacuate within one hour and still be approximately 70 vehicles below the capacity. The extra evacuation lane essentially doubles the capacity and provides a significant buffer of 1,972 vehicles per hour over what would otherwise be necessary.

In terms of evaluating how the additional egress lane assists in the movement of people during an emergency, the following analysis provides perspective. It is not uncommon for it to require up to 90 minutes elapsed time from the time the decision is made to evacuate until all evacuees have left their occupancy of origin. Included in this time is dispatch notification to activate Reverse 911, police respond to the area, Reverse 911 calls are completed, and residents gather belongings and leave in their vehicles. If only 1 lane was available for egress at HGVS, it would be anticipated that the evacuation protocol (decision to evacuate, notification to initiate Reverse 911, police respond, and completion of Reverse 911) would take roughly 45 minutes and moving the worst case 1,828 vehicles out of the

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area would require just under one hour, for a total time of 1'45". This time can be reduced significantly with a second lane, as proposed for this project. The evacuation protocol time remains constant at 45 minutes, but the movement of 1,828 vehicles on two lanes cuts the nearly 1 hour to 30 minutes, for a savings of roughly 30 minutes for a complete evacuation when compared to the one lane scenario. Note: As the entitlement process tends to reduce project unit count, this condition should be considered worst case and may be modified resulting in fewer people and reduced timeframes.

3. **Extension of Three Lane Road Into Project.** The three lane road will extend into the project such that no structure is more than 800 feet from the additional lane (Appendix E). This measure provides for wide roadways and is intended to satisfy the fire code requirement of 800 feet maximum dead end road length.
4. **HGVS New Bridge/Crossing.** The existing condition for the estimated 60 residential units that currently rely on Country Club Drive as their only ingress/egress will be improved from a fire safety perspective. The improvements to the existing Arizona Crossing at Escondido Creek will provide year round access where historically, the roadway can be flooded. Also, the project provides a potential temporary refuge if early evacuation is not possible. The new bridge will include the "three-lane capacity," along with barrier separated pedestrian and equine pathways, and from this intersection, provides significant multiple evacuation routes (Appendix E).
5. **HGVS Opticom Signaled Intersection.** Harmony Grove Road and Country Club Drive is a signaled intersection with Opticom traffic control system, which aids response to HGVS by enabling responding fire engines to control the signal for their continuation through the intersection or control the signal during an evacuation event.
6. **HGVS Shelter in Place Philosophy (Not Status).** The project will incorporate the same fire protection philosophies as Rancho Santa Fe's shelter in place communities, but will not seek shelter in place status. HGVS, like most new communities in San Diego County, will offer the last resort option of temporarily seeking refuge on site if early, safe evacuation is not possible.
7. **HGVS Exceeds Chapter 7A Ignition-Resistant Building Standards.** The project will be subject to Chapter 7A ignition resistant building standards and will exceed those requirements in key areas:
 - a. All ventilation for the structures for the development would require ember-resistant vents in addition to 1/8 screening. This exceeds current Building Code requirements.
 - i. Vents for all structures will be ember resistant (Brandguard or O'Hagin)
 - ii. Dryer vents will be ember resistant

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8. **HGVS Community Building: Temporary Refuge/Staging Area.** A community building/club house will be provided that is roughly 5,000 square feet in size (Appendix E). Although not planned as an evacuation center, the building would be available for temporary refuge in the event that wildfire prevented an early evacuation from the site for a portion of the residents or fire agencies needed a staging location. A 5,000 square foot building could temporarily refuge up to 330 people for a short duration. The building would be provided:
- Several large-panel television monitors discreetly located so those that are interested may track newscasts during an emergency event
 - Large computer monitors and capable computers for tracking fire incident status
 - Several computer terminals available for communicating via e-mail
 - Back-up power – battery banks that are “float” maintained and/or supported by solar panels
 - Second utility source or U.L.-rated diesel generator
 - Emergency preparedness kits to make brief stay as comfortable as possible
9. **HGVS Exceeds Fuel Modification Zone Standards.** The structures will be a minimum of 100 feet from wildland fuels. Fuel Modification Zone setbacks exceed the County standard 100 feet that is typically 50 feet irrigated and 50 feet thinned zones. HGVS provides 75 feet of irrigated Zone 1 and a minimum of 25 feet of thinned Zone 2 (Appendix E).
- a. The entire project will include irrigated, Zone 1 Fuel Modification landscaping with no extension or intermingling of naturalized vegetation/fuels within the community.
10. **HGVS Landscape and Building Elements Provided, Not Required.** An important component of the landscape plan that is not currently required by the County Codes is in the area adjacent to stucco building structures’ foundations. A 1 to 3 foot wide landscape free area would be provided to prevent flame impingement under the stucco along the weep screed and help prevent ember penetration into the structure stucco walls.
11. **HGVS Provides Three Separate Egress Points.** The project provides three separate access ways off of Country Club Drive (Appendix E). The first occurs as a paved service road 450 feet south of Harmony Grove Road adjacent to the HGVS waste water land use area. The second is an access into the community approximately 800 feet south of the first access. The third is approximately 400 feet south of the second. These three access ways are part of a looped interior road system so if one or both of the southern roads are blocked, the northern roadway is still accessible by all residents. These three ingress/egress points are in addition to the alternative evacuation route to the east described in item 1 above.
12. **HGVS Road Maintenance Funding Entity Defined.** A funding entity will be established to ensure that the private roads are maintained and available to emergency responders.

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13. **HGVS Annual Fire Operation Contribution.** The project will contribute fair-share funding annually toward fire operations through participation in the County's CSA or RSFFPD's fee schedule. Additional one time funds would be generated in the form of County Fire Fees and/or a developer agreement and would provide funding toward fire operations and safety.
14. **HGVS Automatic- And Mutual-Aid Agreements.** Automatic and mutual aid agreements with neighboring fire agencies would enable truck company response to the site's 3 and 4 story structures, if needed. Escondido's truck company is a calculated 7 minutes 52 seconds from the most remote portion of the project. Automatic aid agreements would need to be negotiated and depending on what agency is operating the new fire station, could require acquisition of a ladder truck if automatic aid cannot be established.
15. **HGV Fire Station Fast Response Travel Time to HGVS.** The planned fire station 1.3 miles to the north of the HGVS can provide response to all HGVS lots (including the most distant) within 2 minutes and 50 seconds. This is well below the General Plan's 5 minute travel time standard.
16. **Fire Flow Exceeds County Requirement.** The Rincon Water District will provide water service for HGVS and requires that new developments must design the water system to deliver two simultaneous 2,500 gpm fire demands in the area of the project. Thus, the water system will be designed to deliver 5,000 gpm during fire demands.
 - a. 2014 San Diego County Fire Code, Section 507.3 Fire Flow – Exceed Code by designing to 5,000 gpm.
17. **HGVS Exceeds Fire Hydrant Code Requirement.** Additional fire hydrants would be placed every 300 feet along project streets. Fire Code requirement is 350 feet to the structure. The additional fire hydrants assist fire operations by reducing operational time to extinguish any fires.
 - a. 2014 Consolidated Fire Code Section 507.5.1.1.1 Hydrant spacing - Exceeds Code Requirements of 350 feet.
18. **HGVS Exceeds Fire Code Requirements: No Gates Or Speed Bumps.** No gates or speed bumps or humps would be allowed in this project. This would allow traffic flow (ingress and/or egress) to move more rapidly in the case of emergency.
 - a. 2014 Consolidated Fire Code Section 503.6 Security Gates – Exceeds code requirements by not allowing gates.
19. **HGVS Provides Signage/Way Finding Plan.** The project will provide a lighted directory at each project entrance to assist with navigation through the community. In addition, street signs will be customized for this project and will meet or exceed lettering size. The goal is to provide clear, easy to follow signage to aid emergency response.

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20. **HGVS Formal Landscape Plan – Fire Authority Review.** A formal landscaping plan would be required for the project and its seven new parcels. Landscaping would be maintained on an ongoing basis. If the area is annexed into RSFFPD, review of the plan would be by Rancho Santa Fe Fire Protection District’s Fire Prevention Specialist/Urban Forester. This would assure that the use of highly flammable species is prohibited and that appropriate plant densities would be maintained. This would also reduce the impact of landscaping hanging into the roadways by reviewing size and location of trees and maintain 13-foot, 6-inch vertical clearance for fire apparatus. If not annexed, then a 3rd party fire protection planning firm will provide landscape review to the level RSFFPD would perform.
- a. 2014 Consolidated Fire Code Section 4907.4, Landscape Plans – Rancho Santa Fe has staff to enforce this section of the Fire Code. More restrictive than the current code requirements.
 - b. Annual weed abatement notices will be mailed to all property owners in the Fire District
21. **HGVS Exceeds Monitoring Requirement (No RSF Annex).** If the project is not annexed into RSFFPD, the project will annually hire a Wildland Urban Interface/Fuel Modification Zone qualified inspector to ensure that the entire site landscape (excluding private backyards) is maintained to the County and Fire Agency standards and to the requirements of the project’s FPP. The inspector would provide a letter to the County certifying that the landscape maintenance is compliant.
- a. This exceeds the code as there is no requirement for this level of monitoring.
22. **HGVS Trash Enclosure Exceed Building Code.** All trash enclosures would be located at least 10 feet from any structures.
- a. Trash enclosures are not addressed in the Building Code. More restrictive than the current code requirements.
23. **HGVS Parking Management Plan.** The project has been planned to far exceed the available resident and guest parking standards (Appendix F). The project will include two parking spaces for each residential unit. In addition, the project would be required to include 52 parking spaces for guests. However, the project far exceeds this by providing 434 guest parking spaces, 382 spaces over the required level. Analysis of the parking spaces and their proximity to residences was performed and conforms with SD County Zoning Plan. In addition, a parking management plan will be prepared that requires the project to designate the club house parking area as the valet/shuttle staging area for all homeowners events exceeding 10 guests. Homeowners will need to obtain a parking permit to utilize any of the guest parking overnight. Lastly, a contract with a towing company will be in place so that any vehicle that is illegally parked will be towed within a short timeframe. These efforts are

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designed to maintain the provided roads as unobstructed travel lanes so that emergency response vehicles are not hindered during responses.

24. **HGVS All Risk Emergency Preparedness Plan.** An All Risk Disaster and Emergency Preparedness Working Guide based on the “Ready, Set, Go”! model will be developed for the project covering the following subjects:

- a. Preparing your home – landscaping and home.
- b. Preparing your communications – 911, contact information, telephone usage, email, radio stations, and useful links using the internet.
- c. Registering home and cell phones with Reverse 911
- d. Preparing yourself and family – emergency routes out.
- e. Preparing for imminent evacuation.
- f. Preparing your pets and animals.
- g. Maps showing exit routes.
- h. Main evacuation routes and public safe zones.

25. **Community Evacuation Planning Coordination with Office of Emergency Services and Law Enforcement Agencies.** The project will work with evacuation coordinators at the San Diego County OES and San Diego Sheriff’s offices. A key to any evacuation of a large number of people is controlling the intersections downstream of the evacuating population. To that end, evacuation routes available to the HGVS project will be identified and prioritized and key intersections mapped and shared with OES and the Sheriff’s office. Integration of this information into pre-planned evacuation scenarios will assist these agencies in mobilizing the necessary number of officers to control these key intersections for movement of HGVS residents during an emergency situation.

26. **Site Implementation Agreement.** If adopted by the County, the developer agrees to implement San Diego County’s (pending) “Site Implementation Agreement” that would ensure the implementation of the above conditions associated with this project (Appendix G).

5.2.1.3 Entrances

Gates are not anticipated at the project’s entrances. If gates are proposed elsewhere, all access gates will comply with CFC Section 503.6. Gates on private roads and driveways will comply with County standards for electric gates including an emergency key-operated switch overriding all command functions and opening the gate. Gate setbacks from roadway and other code requirements will be required.

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5.2.1.4 Dead Ends

Roadway cul-de-sacs will comply with the County's minimum 36-foot radius (72-foot diameter) cul-de-sac bulb standard. Where parking is provided within cul-de-sacs, the additional space is provided outside the 72-foot diameter bulb.

5.2.1.5 Width and Turning Radius

All proposed private streets will have a minimum paved width of 24 feet. Where vehicles are allowed to park on one side of the street, the road width is 30 feet. Head-in parking is planned for some project roadways (Private Drives A, I, and J), and include an additional 18 feet of paved area outside the 12 foot travel lanes. Three 12 foot travel lanes are provided along Country Club Drive and Private Drive A to the point of intersection with Private Drives D and E. "No Parking" signs will be installed on one side of the street, once the asphalt is installed and prior to the beginning of construction of any structure. Turning radius for fire apparatus access roads will be 28 feet as measured on the inside edge of the improved width.

Fire Apparatus Access roads at the 4-story structures will include a widened area of 26 feet to allow for truck access and operations.

5.2.1.6 Grade

The maximum grade for new roads and driveways on HGVS will not exceed 20%. Should any sections of road or driveway exceed 15%, they will be will be constructed with Portland Concrete surface and provided heavy broom finish or equivalent surfacing to Fire Department approval. Grades along the Alternative Evacuation Egress may exceed 20%, but are not anticipated to be accessed by fire apparatus.

5.2.1.7 Surface

All fire access and vehicle roadways (excluding the Alternative Evacuation Egress) will be of asphaltic concrete, except as noted above for grades exceeding 15%, and designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 pounds) that may respond, including Type I engines, Type III engines, ladder trucks, and ambulances. Access roads shall be completed and paved prior to issuance of building permits and prior to combustible construction occurring.

5.2.1.8 Vertical Clearance

Minimum unobstructed vertical clearance of 13 feet 6 inches will be maintained for the entire required width for all streets, including driveways that require emergency vehicle access.

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5.2.1.9 Identification

Identification of roads and structures will comply with County Fire Code, Section 505.1, as follows:

- Each of the project's three entrances will be provided a map directory and internal signage will be customized to provide clear, intuitive navigation within the Project.
- All structures shall have a permanently posted address, which shall be legible from the street. If it is not legible from the street, an address shall also be posted at street entrance to driveway and shall be visible from both directions of travel.
- Numbers shall be 4 inches high with 0.5-inch stroke.
- Numbers will contrast with background.

5.2.2 Water

Water service for the Harmony Grove Village South Project will be provided by Rincon del Diablo MWD and will be consistent with County requirements (Section 507.2/507.3). The water system will be public and metered. The water distribution system is designed to yield a minimum residual pressure of 40 pounds per square inch (psi) during peak hour demands and a minimum residual pressure of 20 psi during maximum day demands plus fire flow. The minimum fire flow requirements for the project will be dual 2,500 gpm at 20 psi, compliant with the requirements of the County and Rincon Water District. Appendix H includes the Project's Facility Availability Letter for Water.

5.2.2.1 Hydrants

Hydrants shall be located along fire access roadways as determined by the SDCFA/RSFFPD Fire Marshal to meet operational needs, at intersections, at the beginning radius of cul-de-sacs, and every 300 feet (on-center) of fire access roadways, exceeding the RSFFPD Code. Hydrants will be consistent with County/RSFFPD Design Standards (507.5.1.1.3).

A three-foot clear space (free of ornamental landscaping and retaining walls) shall be maintained around the circumference of all fire hydrants. Hydrants will be in place and serviceable prior to delivery of combustible materials to the site.

5.2.2.2 Fire Sprinklers

All habitable structures and garages will be provided interior residential fire sprinklers per County Fire Code requirements. Automatic, internal fire sprinklers shall be in accordance with NFPA 13-D Automatic Fire Sprinkler System requirements. Multi-family units will utilize NFPA 13-R sprinkler systems, to code.

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5.2.3 Pre-Construction Requirements

Prior to bringing combustible materials onto the site, utilities shall be in place, fire hydrants operational, an approved all-weather roadway in place, and fuel modification zones established and approved. The phasing of these infrastructural components may coincide with project phasing, to the approval of the FAHJ.

5.3 Ignition Resistant Construction and Fire Protection Systems

All new structures will be constructed to County Fire Code standards. Each of the proposed buildings will comply with the enhanced ignition-resistant construction standards of the 2013 California Building Code (Chapter 7A). These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires.

There are two primary concerns for structure ignition: 1) radiant and/or convective heat and 2) burning embers (NFPA 1144 2008, IBHS 2008, and others). Burning embers have been a focus of building code updates for at least the last decade, and new structures in the WUI built to these codes have proven to be very ignition resistant. Likewise, radiant and convective heat impacts on structures have been minimized through the Chapter 7A exterior fire ratings for walls, windows and doors. Additionally, provisions for modified fuel areas separating wildland fuels from structures have reduced the number of fuel-related structure losses. As such, most of the primary components of the layered fire protection system provided the project are required by County of San Diego and state codes but are worth listing because they have been proven effective for minimizing structural vulnerability to wildfire and, with the inclusion of required interior sprinklers (required in the 2010 Building/Fire Code update), of extinguishing interior fires, should embers succeed in entering a structure. Even though these measures are now required by the latest Building and Fire Codes, at one time, they were used as mitigation measures for buildings in WUI areas, because they were known to reduce structure vulnerability to wildfire. These measures performed so well, they were adopted into the code. The following project features are required for new development in WUI areas and form the basis of the system of protection necessary to minimize structural ignitions as well as providing adequate access by emergency responders:

1. Application of Chapter 7A, ignition resistant building requirements
2. Minimum 1-hour rated exterior walls and doors

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3. Multi- pane glazing with a minimum of one tempered pane, fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or be tested to meet the performance requirements of State Fire Marshal Standard 12-7A-2
4. Ember resistant vents (recommend BrandGuard, O'Hagin or similar ember resistant vents)
5. Automatic, Interior Fire Sprinkler System to code for all habitable dwellings and garages
6. Modern infrastructure, access roads, and water delivery system.

5.4 Defensible Space and Vegetation Management

5.4.1 Fuel Modification

A fuel modification zone (FMZ) is an important component of a fire protection system for the project site. Fuel modification zones are designed to gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the WUI exposed structures. Because this site will utilize ignition resistant construction building materials, the proposed fuel modification areas are anticipated to provide adequate set back from naturally occurring fuels. The interior of the project will include an irrigated landscape that excludes the intermingling of native fuels. In other words, the entire developed area will be maintained, irrigated landscape that is ignition resistant. The perimeter of the project will include varying FMZ widths. At least 100 feet of fuel modification will be achieved for all lots and will include a minimum of 75 feet of irrigated Zone 1 and a minimum of 25 feet of thinned Zone 2. The adequacy of the provided FMZ widths is based on a variety of analysis criteria including predicted flame length, fire intensity (BTUs) and duration, site topography, extreme weather, position of structures on pads, position of roadways, adjacent fuels, neighboring communities relative to the proposed project, type of construction, and additional fire protection features proposed.

Based on the predicted fire intensity and duration along with flame lengths for this project site and the provided brush management areas, the highest concern is considered to be from firebrands or embers as a principal ignition factor. To that end, this site, based on its location and ember potential, is required to include the latest ignition and ember resistant construction materials and methods for roof assemblies, walls, vents, windows, and appendages, as mandated by San Diego County Fire and Building Codes (Chapter 7A and 2014 Consolidated Fire Code). Ember resistant vents (BrandGuard, O'Hagin, or similar approved vent) will be utilized in all structures.

The individual lot owners will be subject to strict limitations, prohibiting owners from erecting combustible structures, including fences, trellises, arbors, play equipment, etc. as the most

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critical area for structure protection (besides ember protection) is the structure itself and the immediate landscaping area.

5.4.1.1 Fuel Modification Zone Requirements

As one layer of the fire protection system alternative measures for mitigating secondary access/long dead end road length constraints, the project will exceed the 2014 CCFC and 2014 CFC Ordinance #10337 that require that fuel modification zones be provided around every building that is designed primarily for human habitation. Decks, sheds, gazebos, freestanding open-sided shade covers and similar accessory structures less than 250 square feet and 30 feet or more from a dwelling, and fences more than 5 feet from a dwelling, are not considered structures for the establishment of a fuel modification zone. Typically, Zone 1 is a 50 foot wide irrigated, low fuel zone. Zone 2 is a 50 foot wide thinned zone. Fuel modification zones on the HGVS project site will exceed these standards as follows:

1. The entire internal project area including between residential structures and building clusters shall be cleared of vegetation and re-planted with permanently irrigated fire-resistant plants. This results in the exclusion of native fuels within the development area and minimizes the likelihood of ignitions internal to the project.
2. Perimeter lots will include at least 100 feet of FMZ with an extended Zone 1 (from 50 feet to 75 feet) and a minimum of 25 feet of thinned Zone 2.
3. The County/RSFFPD may provide lists of prohibited and recommended plants. This FPP includes a proposed list of suggested plants for FMZs (Appendix I) and prohibited plants (Appendix J).
4. The fuel modification zone will be located entirely on the HGVS property.
5. To ensure long-term identification and maintenance, permanent markers will be installed to identify the fuel modification zones on the perimeter of the developed areas.

Roadway Fuel Modification Zones

Roadway fuel modification is addressed in San Diego County Fire Code (Section 4907.2.1 - Fuel Modification of Combustible Vegetation from Sides of Roadways). SDCFA's Fire Marshal may require a property owner to modify combustible vegetation in the area within 20 feet from each side of the driveway or a public or private road adjacent to their property to establish a fuel modification zone.

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Special Fuel Management Issues

Trees may be planted within FMZs as long as they conform to Section 4907.3. Trees of the County Fire Code. On the Project site, tree planting in the fuel modification zones and along roadways is acceptable, as long as they meet the following restrictions as described below and in the Vegetation Management Section:

- For streetscape plantings, fire resistive trees can be planted within provided parkways. Care should be given to the type of tree selected, that it will not encroach into the roadway, or produce a closed canopy effect.
- Crowns of trees located within defensible space shall maintain a minimum horizontal clearance of 10 feet for fire resistant trees. Mature trees shall be pruned to remove limbs one-third the height or 6 feet, whichever is less, above the ground surface adjacent to the trees.
- Dead wood and litter shall be regularly removed from trees.
- Ornamental trees shall be limited to groupings of 2–3 trees with canopies for each grouping separated horizontally as described in Table 7 (Table 4907.3.1 from County Fire Code).

Table 7
Distance Between Tree Canopies by Percent Slope

Percent of Slope	Required Distances Between Edge of Mature Tree Canopies ⁽¹⁾
0–20	10 feet
21–40	20 feet
41+	30 feet

¹ Determined from canopy dimensions as described in Sunset Western Garden Book (Current Edition)

Specific Landscaping Requirements

The following requirements are provided for HOA-maintained fuel modification zones and individual homeowner yards. Each zone would include permanent field markers at the property line to delineate the zones, aiding ongoing maintenance activities that will occur on site. All landscaping shall be maintained by the homeowner and/or Harmony Grove Village South HOA.

Plants used in the fuel modification areas or landscapes will include drought-tolerant, fire resistive trees, shrubs, and groundcovers. The plantings will be consistent with County of San Diego's Suggested Plant List for Defensible Space (Appendix D). The intent of the list is to provide examples of plants that are less prone to ignite or spread flames to other vegetation and combustible structures during a wildfire. Additional Plants can be added to the landscape plant material palette with the approval from the County of San Diego.

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Landscape plans shall be in accordance with the following criteria:

1. All fire resistive tree species shall be planted and maintained at a minimum of 10 feet from the tree's drip line to any combustible structure. Non-fire resistive trees (including conifers, pepper trees, eucalyptus, cypress, and palms (*Washingtonia* and *Phoenix* species)), shall not be allowed on site. A list of acceptable trees can be found in Appendix I.
2. Limit planting of large unbroken masses especially trees and large shrubs. Groups should be 2–3 trees maximum, with mature foliage of any group separated horizontally by at least 10 feet, if planted on less than 20% slope, and 20 feet, if planted on greater than 20% slope. If shrubs are located underneath a tree's drip line, the lowest branch should be at least three times as high as the understory shrubs or 10 feet, whichever is greater.
3. All tree branches shall be removed within 10 feet of a fireplace chimney or outdoor barbecue.
4. Non-combustible surface (pavement, concrete, decomposed granite, etc.) shall be provided for pathways around structures for fire fighter access to side yards and backyards.
5. Combustible mulches and wood chips must be 12 inches away from any side of a combustible structure with weep screeds.
6. Irrigated wet zone (water conserving irrigation systems with efficient drip emitters and “smart” controllers and use of California Friendly landscape concepts)
7. No tree limb encroachment within 10 feet of a structure or chimney, including outdoor fireplaces.
8. Tree maintenance includes limbing-up (canopy raising) 6 feet or one-third the height of the tree, whichever is greater, and removal of dead foliage and branches.

Pre-Construction Requirements

- Perimeter fuel modification areas must be implemented prior to commencement of construction utilizing combustible materials.
- Existing flammable vegetation shall be reduced by 60% on vacant lots upon commencement of construction.
- Dead fuel, ladder fuel (fuel which can spread fire from ground to trees), and downed fuel shall be removed and trees/shrubs shall be properly limbed, pruned, and spaced per this plan.
- The remainder of the FMZs required for the particular lot shall be installed and maintained prior to combustible materials being brought onto any lot under construction.

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Environmentally Sensitive Areas/Riparian Areas

Fuel modification in environmentally sensitive areas, if any are encountered, will require approval from the County and the appropriate resource agencies (California Department of Fish and Game and U.S. Fish and Wildlife Service) prior to any vegetation management activities occurring within those areas.

Prohibited Plants

Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be physical or chemical.

The plants included in the Prohibited Plant List (Appendix J) are unacceptable from a fire safety standpoint, and shall not be planted on the site unless otherwise approved by the RSFFPD.

Vegetation Management Compliance Schedule

All fuel modification area vegetation management shall be completed annually by June of each year and more often as needed for fire safety, as determined by SDFCA. If the project is being provided fire protection by SDCFA, the HOA shall annually hire a 3rd party, qualified FMZ inspector to certify that maintenance has been completed to the intent of this FPP. The HGVS HOA shall be responsible for all vegetation management throughout the common areas of the project site, in compliance with the requirements detailed herein and SDCFA requirements. The Harmony Grove Village South HOA shall be responsible for ensuring long-term funding and ongoing compliance with all provisions of this FPP, including vegetation planting, fuel modification, vegetation management, and maintenance requirements throughout the private portions of the project site.

6 CUMULATIVE IMPACT ANALYSIS

Cumulative impacts from multiple projects can cause fire response service decline and must be analyzed for each project. The HGVS and its proposed maximum 457 residential units and approximately 1,400 residents represent minimal anticipated increases in fire and emergency medical response needs. However, when considered cumulatively with other projects planned in the jurisdictional area, the cumulative impact is considered potentially significant.

Despite the generally low increase in the anticipated number of calls per year from the HGVS site, the project contributes to the cumulative impact on fire services, when considered with other anticipated projects within the primary response area. Without additional resources over time, the cumulative impact may result in a situation where the response capabilities erode and service levels decline. The project's contributions to fire resources through building fees and ongoing fair share allocations, along with state fire fees, combined with the same contributions from future development in the area are expected to result in funding that can be used for enhancing response capabilities and at least maintaining the current standards for firefighting and emergency response, if not improving them in this area of the County where there is a known gap. The approved fire station that will be built in Harmony Grove Village requires additional funding to cover annual operating costs. The HGVS project will provide fair-share funding which will help close the financial gap that currently exists. Over the long term, it is anticipated that fire response in the area will be improved from its current status and SDCFA or RSFFPD will be able to perform its mission into the future at levels consistent with the County Consolidated Fire Code and the San Diego County General Plan.

The requirements described in this FPP, including ignition-resistive construction, additional fire protection systems, and fuel modification/vegetation management, are designed to aid firefighting personnel such that HGVS residents and structures are protected and impacts to the fire response system are minimal. Based on the type of wildfire anticipated/modeled for this area and the corresponding fire protection project features, including conformance with building and fire codes, provisions for alternative ingress/egress, ongoing maintenance of roads, infrastructure, vegetation management and defensible space results in a potentially significant, but mitigated cumulative impact.

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7 CONCLUSION

This FPP is being submitted with a specific request for an exception to the code standard for dead-end road requirements and secondary access.

This FPP supports an application for project entitlement of the HGVS development project. It is submitted in compliance with requirements of the County's (and RSFFPD's) condition for FPP content. The requirements in this document meet fire safety, building design elements, fuel management/modification, and landscaping recommendations of the applicable codes. Where the project does not strictly comply with the Code, specifically with secondary access/dead end road length, alternative materials and methods have been proposed that provide functional equivalency as the code intent, as detailed in Section 5.

Fire and Building Codes and other local, county, and state regulations in effect at the time of each building permit application supersede these recommendations unless the FPP recommendation is more restrictive.

The recommendations provided in this FPP have been designed specifically for the proposed construction of structures adjacent the WUI zone at the HGVS project site. The project site's fire protection system includes a redundant layering of protection methods that have been shown through post-fire damage assessments to reduce risk of structural ignition and provide for at least equivalent emergency evacuation capabilities. Modern infrastructure will be provided along with implementation of the latest ignition resistant construction methods and materials. Further, all structures are required to include interior, automatic fire sprinklers consistent with CFC and CBC.

Fuel modification will occur throughout the project site, both internally and on exposed edges of the developed areas. The fuel modification zone will be maintained and inspected annually by the HGVS HOA, through a qualified 3rd party inspector. Maintenance includes removing all dead and dying materials and maintaining appropriate horizontal and vertical spacing. In addition, plants that establish or are introduced to the fuel modification zone that are not on the approved plant list will be removed.

Ultimately, it is the intent of this FPP to guide, through code and other project specific requirements, the construction of structures that are defensible from wildfire and, in turn, do not represent significant threat of ignition source for the adjacent native habitat. It must be noted that during extreme fire conditions, there are no guarantees that a given structure will not burn. Precautions and mitigating actions identified in this report are designed to reduce the likelihood that fire would impinge upon the proposed structures. There are no guarantees that fire will not occur in the area or that fire will not damage property or cause harm to persons or

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their property. Implementation of the required enhanced construction features provided by the applicable codes and the mitigating secondary access requirements provided in this FPP will accomplish the goal of this FPP to assist firefighters in their efforts to defend these structures, move people to areas away from emergency situations, and reduce the risk associated with this project's WUI location. For maximum benefit, the developer, contractors, engineers, and architects are responsible for proper implementation of the concepts and requirements set forth in this report. Homeowners are responsible to maintain their structures and lots as required by this report and applicable Fire and building Codes.

This FPP recommends that the homeowners or other occupants who may reside within the HGVS neighborhoods adopt a conservative approach to fire safety. This approach must include maintaining the landscape and structural components according to the appropriate standards and embracing a “Ready, Set, Go²” stance on evacuation. Accordingly, occupants should evacuate the residence and the area as soon as they receive notice to evacuate, or sooner, if they feel threatened by wildfire or structure fire in a nearby residence. Fire is a dynamic and somewhat unpredictable occurrence and it is important for residents to educate themselves on practices that will improve their home survivability and their personal safety.

² International Fire Chiefs Association “Ready, Set, Go” website link: <http://wildlandfirersg.org/>

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8 REFERENCES

- Alexander, M.E.; B.J. Stocks, B.M. Wotton, M.D. Flannigan; J.B. Todd; B.W. Butler, R.A. Lanoville. 1998. The international crown fire modeling experiment: an overview and progress report. In: Proceedings of the second symposium on fire and forest meteorology; 1998 January 12–14; Phoenix, Arizona. Boston, Massachusetts: American Meteorological Society; 20–23.
- Anderson, Hal E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, Utah.
- Andrews, Patricia L., Collin D. Bevins, and Robert C. Seli. 2004. BehavePlus fire modeling system, version 3.0: User's Guide. Gen. Tech. Rep. RMRS-GTR-106 Ogden, Utah: Department of Agriculture, Forest Service, Rocky Mountain Research Station. 132p.
- Biswell, Harold H. 1989. Prescribed Burning in California Wildlands Vegetation Management. University of California Press, Berkeley and Los Angeles, California. 255 p.
- Butler, B.W., J. Cohen, D.J. Latham, R.D. Shuette, P. Spoko, K.S. Shannon, D. Jimenez, and L.S. Bradshaw. 2003. Measurements of radiant emissive power and temperatures in crown fires. Canadian Journal of Forest Research. 34:1577–1587.
- CAL FIRE. 2013. Fire and Resource Assessment Program. California Department of Forestry and Fire. Website access via <http://frap.cdf.ca.gov/data/frapgismaps/select.asp?theme=5>.
- Cohen, Jack D. 1995. Structure ignition assessment model (SIAM). In: Weise, D.R.; Martin, R.E., technical coordinators. Proceedings of the Biswell symposium: fire issues and solutions in urban interface and wildland ecosystems. 1994 February 15–17; Walnut Creek, CA. Gen. Tech. Rep. PSW-GTR-158. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 85–92
- Cohen, J.D. 2000. Preventing disaster: home ignitability in the wildland-urban interface. Journal of Forestry 98(3): 15–21.
- Cohen, J.D. and B.W. Butler. 1996. Modeling potential ignitions from flame radiation exposure with implications for wildland/urban interface fire management. In: Proceedings of the 13th conference on fire and forest meteorology. October 27–31; Lorne, Victoria, Australia. Fairfield, Washington: International Association of Wildland Fire.

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- Cohen, J.D. and J. Saveland. 1997. Structure Ignition Assessment Can Help Reduce Fire Damages in the W-UI. *Fire Management Notes* 57(4): 19–23.
- Cohen, Jack and Steve Quarles. 2011. Structure Ignition Assessment Model; The Origins and Basis of SIAM. From presentation at the 2011 NFPA Wildland Fire - Backyard and Beyond Conference in October 2011.
- Dennison, Phillip, Kraivut Charoensiri Dar A. Roberts, Seth H. Peterson, and Robert O. Green. 2006. Wildfire Temperature and Land Cover Modeling Using Hyperspectral Data. Center for Natural and Technological Hazards, University of Utah, University of California Santa Barbara and Jet Propulsion Laboratory. 36 pp.
- Foote, Ethan I.D.; Gilles, J. Keith. 1996. Structural survival. In: Slaughter, Rodney, ed. *California's I-zone*. Sacramento, California: CFESTES; 112–121.
- Helix Environmental Planning. 2014. Draft Vegetation Map for Harmony Grove Village South.
- Howard, Ronald A., D. Warner North, Fred L. Offensend, Charles N. Smart. 1973. Decision analysis of fire protection strategy for the Santa Monica mountains: an initial assessment. Menlo Park, CA: Stanford Research Institute. 159 p.
- Institute for Business and Home Safety (IBHS). 2008. *Megafires: The Case for Mitigation*. 48 pp.
- International Code Council, Inc. 2012. *International Wildland-Urban Interface Code: Appendix G – Self-Defense Mechanism*. April 2011.
- Manzello, Samuel, R. Gann, S. Kukuck, K. Prasad, and W. Jones. 2007. An Experimental Determination of a Real Fire Performance of a Non-Load Bearing Glass Wall Assembly. National Institute of Standards and Technology. 13 pp.
- NFPA 285. Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components. 2012 Edition.
- NFPA 1144. Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008. Technical Committee on Forest and Rural Fire Protection. Issued by the Standards Council on June 4, 2007, with an effective date of June 24, 2007. Approved as an American National Standard on June 24, 2007.
- Pyne, Stephen, Patricia Andrews, Richard Laven. 1996. *Introduction to Wildland Fire*, Second Edition. Chapter 1, Section 4. Pg. 21.

Harmony Grove Village South Fire Protection Plan

- Quarles, S.L. and F.C. Beall. 2002. Testing protocols and fire tests in support of the performance-based codes. In 'Proceedings of the California 2001 Wildfire Conference: 10 Years after the 1991 East Bay Hills Fire', 10–12 October 2001, Oakland, California. University of California, Forest Products Laboratory, Technical Report 35.01.462, pp. 64–73. Richmond, California.
- Quarles, Stephen, Yana Valachovic, Gary Nakamura, Glenn Nader, and Michael De Lasaux. 2010. Home Survival in Wildfire Prone Areas – Building Materials and Design Considerations. 22 pp.
- Ramsay, Caird and Lisle Rudolph. 2003. Landscaping and Building Design for Bushfire Areas. Chapter 2.
- Rothermel, R.C. 1983. How to Predict the Spread and Intensity of Forest and Range Fires. USDA Forest Service Gen. Tech. Report INT-143. Intermountain Forest and Range Experiment, Ogden, Utah.
- SANDAG. 2013. San Diego Association of Governments. Average persons per dwelling unit statistics. Website access: <http://www.sandag.org/>.
- San Elijo Conservancy. 2005. The Escondido Creek Restoration Action Plan. https://www.sanelijo.org/sites/sanelijo.org/files/Publications/Reports/Esc_Creek_Action_Plan.pdf
- Scott, Joe H. and Robert E. Burgan. 2005. Standard fire behavior fuel models: a comprehensive set for use with Rothermel's surface fire spread model. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, Colorado: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.
- Tran, H.C., J.D. Cohen, R.A. Chase. 1992. Modeling ignition of structures in wildland/urban interface fires. In: Proceedings of the 1st international fire and materials conference; 1992 September 24–25; Arlington, Virginia. London, United Kingdom: Inter Science Communications Limited; 253-262.
- University of California Agriculture and Natural Resources. 2011. Web Site: Builders Wildfire Mitigation Guide. <http://firecenter.berkeley.edu/bwmg/windows-1.html>
- Weise, D.R. and J. Regelbrugge. 1997. Recent chaparral fuel modeling efforts. Prescribed Fire and Effects Research Unit, Riverside Fire Laboratory, Pacific Southwest Research Station. 5p.

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9 LIST OF PREPARERS

Project Manager/Lead Fire Protection Planner:

Michael Huff

Fire Protection Planner; San Diego County California Environmental Quality Act Consultant List
Dudek

FPP Preparation:

Sid Morel

Fire Protection Planner
Dudek

FPP Preparation and Fire Behavior Modeling:

Michael Scott

Urban Forester/Fire Protection Planner
Dudek

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EXHIBIT 8

MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

SAN DIEGO COUNTY, CALIFORNIA

Participating Jurisdictions:

Carlsbad	National City
Chula Vista	Oceanside
Coronado	Poway
Del Mar	San Diego
El Cajon	San Marcos
Encinitas	Santee
Escondido	Solana Beach
Imperial Beach	Vista
La Mesa	County of San Diego
Lemon Grove	Rancho Santa Fe FPD



August 2010



4.3.7 Structure/Wildfire Fire**4.3.7.1 Nature of Hazard**

A structural fire hazard is one where there is a risk of a fire starting in an urban setting and spreading uncontrollably from one building to another across several city blocks, or within hi-rise buildings.

A wildfire is an uncontrolled fire spreading through vegetative fuels and exposing or possibly consuming structures. They often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees fuel wildfires. A wildland fire is a wildfire in an area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities. An Urban-Wildland/Urban Interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels. Significant development in San Diego County is located along canyon ridges at the wildland/urban interface. Areas that have experienced prolonged droughts or are excessively dry are at risk of wildfires.

People start more than 80 percent of wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior. The continuity of fuels, expressed in both horizontal and vertical components is also a determinant of wildfire potential and behavior. Topography is important because it affects the movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Weather affects the probability of wildfire and has a significant effect on its behavior. Temperature, humidity and wind (both short and long term) affect the severity and duration of wildfires.

San Diego County's topography consists of a semi-arid coastal plain and rolling highlands, which, when fueled by shrub overgrowth, occasional Santa Ana winds and high temperatures, creates an ever-present threat of wildland fire. Extreme weather conditions such as high temperature, low humidity, and/or winds of extraordinary force may cause an ordinary fire to expand into one of massive proportions.

Large fires would have several indirect effects beyond those that a smaller, more localized fire would create. These may include air quality and health issues, road closures, business closures, and others that increase the potential losses that can occur from this hazard. Modeling for a larger type of fire would be difficult, but the consequences of the most recent San Diego fires (Firestorm of October 2003) should be used as a guide for fire planning and mitigation.

4.3.7.2 Disaster History

Table 4.3-3 lists the most recent major wildfires in San Diego County. Wildland fires prompted five (5) Proclaimed States of Emergency, and Urban/Intermix Fires prompted three (3) Proclaimed States of Emergency in the County of San Diego in the period 1950-2007. In October of 2003 the second-worse wild-land fire in the history of San Diego County destroyed 332,766

5.21.2.2 Objectives and Actions

The County of San Diego developed the following broad list of objectives and actions to assist in the implementation of each of their 11 identified goals. The County of San Diego developed objectives to assist in achieving their hazard mitigation goals. For each of these objectives, specific actions were developed that would assist in their implementation. A discussion of the prioritization and implementation of the action items is provided in Section 5.21.2.3.

Goal 1: Promote disaster-resistant future development.	
<i>Objective 1.A: Facilitate the development or updating of general plans and zoning ordinances to limit development in hazard areas.</i>	
Action 1.A.1	Update General Plan every 10 years.
Action 1.A.2	Attract and retain qualified, professional and experienced staff.
Action 1.A.3	Continue to identify high hazard areas using GIS.
<i>Objective 1.B: Facilitate the adoption of building codes that protect existing assets and restrict new development in hazard areas.</i>	
Action 1.B.1	Review Codes every 3 years.
<i>Objective 1.C: Facilitate consistent enforcement of general plans, zoning ordinances, and building codes.</i>	
Action 1.C.1	Staff enforcement personnel to a level to ensure compliance.
Action 1.C.2	Develop and coordinate permits for all agencies.
Action 1.C.3	Continue to utilize multi-agency permitting and enforcement team.
<i>Objective 1.D: Limit future development in hazardous areas</i>	
Action 1.D.1	Development should be in harmony with existing topography.
Action 1.D.2	Development patterns should respect environmental characteristics.
Action 1.D.3	Clustering should be encouraged.
Action 1.D.4	Development should be limited in areas of known geologic hazards.
Action 1.D.5	Development in floodplains shall be limited to protect lives and property.
Action 1.D.6	High fire hazard areas shall have adequate access for emergency vehicles.