Final Report of the Fire Risk Assessment & Mitigation Committee to the Board of Directors on Completion of "Actions Achievable Short Term" Set Forth in the Committee's Report of December 21, 2021

December 13, 2023

Introduction

Following the first formal meeting of the Fire Risk Assessment & Mitigation ("FRAM") Committee on September 16, 2021, pursuant to its establishment by the HCCA's Board of Directors on July 22, 2021, the Committee immediately set forth to circumscribe its multiple goals and carefully articulate them in a Report to the Board of Directors. That Report was drafted and circulated to the Committee's appointed members, and after several iterations in draft form, was adopted by the Committee for presentation to the Board of Directors, which occurred on December 21, 2021. At this same December meeting of the Board of Directors, the Board voted to adopt the Report.

Critical to the production of the 2021 Report was the need to hire a wildfire mitigation and suppression expert to act as consultant to the FRAM Committee, and finding a consultant was among the first of the Committee's actions. The Board of Directors thereafter authorized obtaining the services of such a fire suppression expert who, after a site survey of our property, provided a written assessment of Hacienda Carmel's risk of catastrophic damage from wildfires that included specific recommendations regarding the mitigation, reduction, and/or elimination of all aggregate risks from wildfires in light of both California Public Resource Code statute §4291, and any other applicable laws, ordinances, or regulations pertaining to combustible substances and wildfire mitigation. The work of that expert was reviewed by yet another such expert, at the behest of the HCCA's insurance broker, who provided two other separate and detailed follow-up reports with recommendations to the Board of Directors.

Armed with these multiple reports with specific recommendations, and together with significant additional reading, research, consultation with CalFire officials, and networking with other fire safety and firefighting organizations, the FRAM Committee was able to produce the 2021 Report, which was essentially divided into two main categories of concern and mitigation measures pertaining to wildland fires. These two categories were referred to in the 2021 Report as (I) "Actions Achievable Short Term" beginning on page 8, and as (ii) "Actions

Achievable Long Range" beginning on page 12.

This Final Report of December 13, 2023, after the passage of nearly two years since adoption of the 2021 Report, outlines in what follows the implementation and completion of the listed Actions Achievable Short Term with a brief description of each. In addition to the 2021 Report's specifically listed Actions Achievable Short Term were several additional short-term strategic goals set forth in the Report as "Recommendations" on pages 18 and 19. Finally, in addition to those combined Actions Achievable Short Term and Recommendations are several other related fire-mitigation actions that were achieved under the FRAM Committee's auspices that were *not* expressly listed as proposed actions or recommendations within the 2021 Report.

The following "bullet point" items are those expressly listed in the 2021 Report as "Actions," and which now have been achieved with one exception. These are briefly described immediately following the listed action. This is followed by similar descriptions of achievement of three "recommendations" made by the Committee for actions to be taken by the HCCA. Finally, several actions not listed in the 2021 Report either as Short Term or as Recommendations, but were nonetheless achieved through the Committee's efforts, are also described in a separate section immediately prior to this Report's Conclusion.

Actions Achievable-and Achieved-Short Term

• <u>Revision of HCCA's "Tree Planting" section of its "Tree Policy" among its</u> <u>Approved Policies, to conform to the California statutory and regulatory mandates</u> <u>regarding the distancing of trees, at full maturity, a certain number of feet from</u> <u>structures and other trees, both vertically and horizontally</u>.

After drafting changes to the existing Tree policy, which changes then circulated to the members of the FRAM Committee and the Architectural Review Committee, several iterations of the revisions were adopted by the Committees. Ultimately, a final revision acceptable to all parties was presented to the Board, which adopted the new Tree Planting section of the Association's Tree Policy on May 26, 2022. Among the wildfire-specific changes made by the FRAM Committee were that no tree planting will be allowed within 25' of the berm, any existing building, or electric power lines; required approval of the species of the tree to be planted (native or non-native); required approval of the projected size (height & width) of the tree at full growth or maturity assuring that the fully mature tree at its proposed location conforms to all applicable vertical and horizontal distancing laws and regulations set forth in PRC Section 4291 and 14 CCR Section 1299.03; a determination that the proposed tree is among those with a favorable fire performance rating on www.firesafemonterey.org/plant-lists.html website; and a determination of the tree's potential impact on natural habitats of birds, bees, and other insects or animals.

• <u>Revision of HCCA's "Architectural Rules for Condominium Owners" in</u> order to require installation only of fire-resistant or fire-safe tempered glass, expressly excluding any plastic or combustible materials, for all skylights that are (i) new installations; (ii) necessary replacements of older existing skylights; and (iii) retrofits of older existing skylights hereafter required in Units at the time of their transfers of title.

Page 11 of the Association's "Architectural Rules for Condominium Owners." Not unlike the process regarding the revisions to the Tree Planting policy, the FRAM Committee drafted changes to the Association's existing skylight policy, which changes then circulated to the members of the FRAM Committee and the Architectural Review Committee, where several iterations of the revisions were adopted by those Committees. Ultimately, a final revision was presented to the Board, which adopted the Association's new skylight policy, becoming effective on March 1, 2023 as the most recent revision of the Association's Architectural Rules.

"As of April 1, 2022 all (i) new skylights and (ii) all replacements of existing skylights made of plastic, acrylic or other combustible material, and subject to the approval of the Architectural Review Committee, must be tempered and fire-safe glass only, and installed with raised curbs and appropriate flashing. Size may not exceed 2' x 4' and once installed any roof leakage from the skylight installation shall be the responsibility of the owner.

Current Owners of Units with functional existing plastic or acrylic skylights are encouraged to consider replacing those skylights pursuant to the standards set forth above for purposes of fire safety in the event of wildland fires. As of July 1, 2022, all Units acquired by new Owners shall, upon sale or transfer of title, be required to show proof of retrofit of any existing skylights made of plastic, acrylic, or other combustible material to the standards set forth above."

• <u>Identification of all existing "firebreaks" within the HCCA campus,</u> together with an examination of how to strengthen and improve these firebreaks. <u>This effort would include both developed firebreaks such as paved roadways, and</u> more natural firebreaks such as the berm and certain open spaces.

Ideally, the best protection from wildland fires available to the HCCA threatening it from outside the Community would be continuous firebreaks surrounding its entire property. Years ago, in order to create more protection from flooding by the Carmel River, a one-mile raised berm was constructed around the property, and later reinforced after serious flooding, which has long been used as a walking path for the Residents. The FRAM Committee, from the outset, identified the berm as a potential firebreak in addition to its original purpose as a flood levee, and sought to have the Residents and Management begin to regard the berm as having this *dual* function–flood levee and firebreak.

To that end, steps were taken early in the Committee's work to have the HCCA's Grounds Crew trim the vegetation around the berm. This was done both to increase its firebreak width from side to side, and to eliminate any tree canopies overhanging the berm where tree branches were reaching over the berm on both sides and touching, thus creating a "fire ladder" or bridge between one side of the berm and the other. Such fire ladders, if ignited, would inevitably import a wildfire from outside into the interior of the Community. While the bulk of that work was done during 2021 and in early 2022, the work is on-going and continues to this day, as vegetation continues to grow and thus requires more trimming.

Similarly, the best protection for the Association's buildings and structures from a wildland fire that may have breached the berm perimeter and further threaten them within the Community is the system of paved parking areas, streets, and driveways that serve as firebreaks throughout its entire property. These include the street entrance from the cul-de-sac at the south end of Via Mallorca to the Hacienda Carmel "loop" drive, the Hacienda Carmel "loop" drive itself, and all the paved areas to, from, and around the seven carports, in addition to the large paved open parking areas.

Over and above identifying the entire berm and all our paved streets and driveways as a system of firebreaks, all the experts who submitted reports about the wildfire vulnerability of the HCCA identified two specific sites as being most vulnerable with regard to wildfires breaching our perimeter and entering into the residential areas of the Community. These are located in the *northwest* corner of the property, where mature cottonwood trees next to but just outside the berm grow close to mature oak trees next to but just inside the berm, and the even more vulnerable site of the *southwest* corner where overgrown vegetation once created fire ladders across the space that separates the property of the HCCA and the Quail Corporation. Extra efforts have been expended to widen and enhance the firebreaks for these two sites, and are further explained below under the bullet point that begins with "Addressing and fortifying the two most critical-risk areas for wildfire intrusion into the campus of the HCCA-the northwest and southwest corners."

• <u>Development of two vehicular accessible ingress/egress routes, and a</u> site-specific comprehensive evacuation plan in the event of a wildland fire.

Given that virtually every emergency evacuation plan for large commercial or residential areas, and municipalities, requires a list of all vehicular routes that provide ingress and egress for those areas, the Committee set out to identify the reliable and authorized routes that Hacienda Carmel Residents might use in a wildland fire or other evacuation. At the outset, it was clear that the "Via Mallorca" route over the bridge and up to Carmel Valley Road was available, but not as clear whether the HCCA was owner of easement rights for right-of-way use for the so-called "Ranch Road" extending from its property's East end through property owned by the Quail Corporation to Rancho San Carlos Road.

For this reason, the Committee set out to determine whether such a right-ofway for the Ranch Road benefitting the HCCA existed in the title or land records of Monterey County, where they would be lawfully recorded. Through diligent research into those records, it was discovered that in a succession of deeds ultimately transferring title to the HCCA's 2.36-acre "East End" parcel, there was an easement described in those records as "A right-of-way for road purposes over a strip of land 20.00 feet wide, lying 10.00 feet on either side of the following described centerline...." The course and bearings of the centerline show clearly that it extends from the "Ranch Road" gate on the East end of the HCCA property to Rancho San Carlos Road, which means that the HCCA *does* in fact have a legal 20' right-of-way for ingress and egress through the servient estate of Quail Corporation property for use by the Residents of Hacienda Carmel in the event of an emergency evacuation.

Thus, with two known and developed legal routes of ingress and egress, the Committee then set out to find an entity capable of drafting an emergency evacuation plan, since it was determined by the Monterey County Office of Emergency Services ("OES") that an off-the-shelf or "do it yourself" evacuation plan would not be a good idea for Hacienda Carmel due to its many senior Residents, some of whom are only marginally ambulatory, and also due to the existence of an assisted living facility within its campus. After considerable research on the Internet and local networking, and compiling a list of possible candidates to effect this work, the Committee met with no success. Moreover, this research was conducted with the collaboration of the Monterey County's OES which at first agreed to advise the HCCA about how to develop a wildfire evacuation plan for the Community in the event another large wildland fire in the Carmel Valley triggers an evacuation order from CalFire.

This collaboration was with Ms. Luna Mohammad, head of OES's Resilience program, part of whose function to is advise on emergency plans, including evacuation plans. The OES initially agreed to compile a list of reputable companies that draft such plans for their clients, and provide the HCCA with that list. However, in a final communication to the Committee's Chair dated February 8, 2023 the OES stated that it was not in a position to assist us. Another letter of inquiry was sent by the Committee to a local entity called Peace of Mind Preparedness regarding evacuation plans. In response to that inquiry, the Committee's Chair received a phone call in response from Ms. Wanda Vollmer, who stated that her organization does not engage in the development of evacuation plans. Having thus exhausted both the options offered by extensive Internet research, and its short list of such entities with inquiries, the Committee was unable to identify any entity that could draft an evacuation plan, though it is possible that in the future new opportunities in this area may arise.

• <u>Removal of vegetation touching or closely adjacent to all PG&E utility</u> poles within HCCA transmitting electricity.

It is universally understood by firefighters, and those who survive wildland fires, that the conflagration of wooden utility poles presents a range of significant problems for firefighters and survivors. This issue within the context of wildland fires is critical, since for firefighters electricity transmission poles that catch fire and burn down often leave broken or snapped but nonetheless live electric wires on rooftops or around ground vegetation and other structures, which then can cause sparking and further ignition, and thus pose the risk of destruction of more property. For survivors, these live wires present a further risk of electrocution of people and animals. Further, where these poles burn down, the loss of power often for a matter of weeks to replace them occurs at a time when power to rebuild and adjust to the ravages of wildland fires on their property is desperately needed.

The law on this matter, PRC §4292, while applicable only to the "owners" of such utility poles, provides that "...any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any...brush-covered land, or grass-covered land shall...maintain around and adjacent to any pole or tower...a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of *such pole or tower*." In the case of the Association, PG&E is the owner of the utility poles on our property, yet much of the vegetation around these utility poles was either planted by or allowed to grow by Association Residents or employees since the installation of those poles in 1962. Accordingly, the Committee believed it was fair to have the Association's Grounds Crew trim the vegetation around them, where it was safe to do so, to the required 10' distance of clear space.

The Committee then undertook a survey of all the electric transmission utility poles on Association property in February 2022, and photographed them. Photos of the 21 poles that were found to pose problems were then conveyed to the General Manager, who provided them to the Association's Grounds Crew. Work on trimming around the utility poles began in March of 2022 and was completed by the end of April. As a result of this work, the significant risks posed by the ignition of these poles in a wildland fire have been substantially mitigated.

• Determining if HCCA's groundwater could be utilized to fight wildland fires via wellheads. While the HCCA campus has eight (8) CalAm fire hydrants on its property, there are also two groundwater wells that pump irrigation water for the vegetation on the campus, using the HCCA's riparian water rights. The action or task here is to...determine if metal plumbing fixtures can be affixed to each of the two wellheads to allow firefighters to attach their hoses and, by using a valve on such fixture, draw water from the wells to fight wildfires.

In early April of 2022, members of the FRAM Committee and the General Manager met on-site with a fire-protection expert from California Fire Protection, Inc., ("CFP") a private company in the business of helping protect its customers against wildfires. With regard to determining if HCCA's groundwater could be utilized to fight wildland fires via the Community's two groundwater wellheads, that initial meeting with CFP's expert revealed that it would probably not be feasible to retrofit the actual wellheads of the HCCA's groundwater system with

new fittings that could accept firefighters' hoses. This was because the force of the draw of the fire engine pumps on the wells' casings and pipes could cause damage to them.

However, in lieu of that, the expert offered an alternative idea: that the HCCA's existing nine (9) standpipes that are all connected through a Communitywide system of underground pipes to its two wells could be fitted with 1.5-inch firehose fittings for wetting the surrounding vegetation and related fire-suppression work. This would be possible because the groundwater standpipe system has enough existing PSI (40) to send streams of water through 1.5" diameter hoses for some distance. With four of these nine standpipes on the north berm next to the Carmel River, and one in the southwest corner of the campus, the ability of the HCCA to fight wildland fires threatening our property will significantly improve, since adapter fittings and hoses for each standpipe are now in place.

On April 22, 2022 CFP submitted a written proposal for retrofitting and painting the existing standpipes, which were serving no real purpose at the time and had not for some years. That proposal stated that the company would "Install 9 hose stations at each of the 9 draft/well private hydrants on perimeter of property. This proposal includes the following: hose reel, 1.5" x 100' fire hose, hydrant wrench, 1.5" brass hose nozzle, reducing hydrant adapter with cap, 2.5" brass cap, adjustable hydrant wrench, hose reel cover, 2' x 2' custom signage, 2" galvanized post secured by concrete for hose reel and signage mounting, service/inspect all 9 draft hydrants. This includes labor for installation of the 9 hose stations." This bid was accepted by the Board of Directors on May 26, and work on this retrofitting began soon thereafter.

A delay in the retrofitting occurred after six of the nine standpipes had been completed by CFP, owing to the fact that two of the standpipes were found to be dry, *i.e.*, non-operational. The HCCA Grounds Crew was tasked with the job of digging to the connections at the bases of these two standpipes to the underground pipe system, and in both instances it was found that the connections had years ago been damaged and disconnected. After the Grounds Crew re-connected one of these two standpipes, and re-located and re-connected the other, CFP was then able to complete the contract by October of that year. With all 9 HCCA standpipes retrofitted with both a 1.5" and 2" hose fitting, painted red, and fully operational with new hoses and hose reels, together with the existing 8 CalAm hydrants in the interior of the property, the HCCA now has a total of 17 operational hydrants available for fire suppression in the event of a wildland fire.

• Fireproofing, to the extent possible, all fuel storage tanks within HCCA

campus (diesel, propane and gas) in order to prevent or preclude ignition and/or explosion during a wildfire. Currently, there are three (3) operative fuel tanks located within the campus.

As the 2021 Report noted, there are currently three (3) operative fuel tanks located within the HCCA property. Two of them, a gasoline tank and a diesel tank located immediately adjacent to Casa Central, are less vulnerable to wildland fires than the third propane tank owing to their relatively protected location away from the perimeter's more forested areas and being in the center of the HCCA campus. Ideally, relocation of the gasoline and diesel tanks away from the structure would be the optimal fire-risk mitigation, but the sizeable cost of such a relocation in the Committee's view, weighed against the lower risk of a wildfire reaching and igniting these tanks, would arguably not be justified.

However, the Committee's views differed as to the third fuel tank, which is a 250-gallon propane tank located at the northwest corner of the property nearly 10' from the inside edge of the berm and directly underneath two large oak trees. The Committee believes that this propane tank is far more of a fire threat to residential structures, due to its vulnerability to wildfires, than both the gas and diesel fuel tanks. Part of this threat consists in a wildfire phenomenon whose acronym is "BLEVE," which stands for "boiling liquid & expanding vapor explosion" that occurs when the heat intensity of wildfires brings the pressure and contents within fuel tanks to a "boiling" or "expanded" condition that results in explosion. The risk of this is compounded by the fact that the location of the propane tank is exactly at the spot of one of the two most vulnerable sites for intrusions of wildfire into the Community–the northwest corner of its property.

At first, the Committee considered installation of a small 3-sided block containment wall approximately 40" high around the propane tank to offset highvelocity debris and shrapnel from any such BLEVE explosion which could both ignite other fires and cause significant structural damage. After much deliberation by the Committee on the subjects of the needed engineering to determine the proper strength of such a containment wall, together with potential permitting restrictions, the Committee opted to select another mitigation measure. Following the guidance of 14 CCR §1299.03(c)(1) regarding propane tanks, the Committee designed and sought bids for construction of a chain-link fence with slats. Accordingly, and as was noted elsewhere in this Report, such a 6' chain-link fence was installed on May 15, 2023. This fence now surrounds the propane tank and associated pump machinery and will protect against ember-cast in a wildfire, reduce the amount of direct heat upon the tank from a wildfire, and will mitigate some damage in the event of a BLEVE explosion of the propane tank, should that ever occur.

• Addressing and fortifying the two most critical-risk sites for wildfire intrusion into the campus of the HCCA-the northwest and southwest corners. Simply by virtue of consulting aerial photographs of the HCCA campus, and through distilling several related conclusions extracted from our experts' reports, it appears that the two most critical points that might become portals for wildland fires into the residential Community are in its northwest and southwest corners.

The first of these two sites, the *northwest* corner of the property, is one where sizeable cottonwood trees next to but outside the berm grow close to sizeable oak trees next to but inside the berm, and whose branches once touched each other immediately above a 250-gallon propane tank. The second and even more vulnerable site is the *southwest* corner, where overgrown vegetation once created fire ladders across the space that separates the property of the HCCA and the Quail Corporation. The vulnerability of this site consists in its contiguity to the Santa Lucia mountains to the south, where large wildfires occur periodically, and where no major developments lie between vast open forests and the HCCA property.

In addressing these two specific vulnerable sites, the Committee proposed extensive limbing of the trees in the northwest corner, which was done, together with installation of a slated 6' chain-link fence that surrounds the propane tank and pump machinery that will protect against ember-cast in a wildfire, reduce the amount of direct heat upon the tank from a wildfire, and will mitigate some damage in the event of an "expanding vapor" explosion of the propane tank should that occur. The chain-link fence was installed and completed on May 15, 2023. With regard to the southwest corner, the fire ladders across the space that separates the property of the Quail Corporation and the HCCA's southwest corner were greatly mitigated by work done for that purpose on June 12-13, 2023 by Lopez Tree Service, and partially paid for by a fuel-reduction grant from the Cypress Fire District. While both these vulnerable sites have been mitigated by trimming and other actions, the HCCA must continue to be mindful of re-growth and keeping these sites free of fire ladders and overgrowth that will reduce the firebreaks. **Further "Recommendations" Made to the Board** (2021 Report, pp. 18 &19) (2) <u>The Committee recommends that the Board consider consulting with an</u> experienced grant writer for the purpose of obtaining fire-mitigation grants in light of the \$1.2 trillion Infrastructure Bill enacted by Congress and signed into law in <u>November of 2021 that</u> offers some extraordinary opportunities for grant funding for wildland fire risk mitigation. (p. 18)

The FRAM Committee, then aware of the significant costs of the Long Range goals of bringing the interior spaces of Hacienda Carmel into acceptable wildfire safety standards and legal compliance, recommended in its 2021 Report searching for and ultimately hiring a professional grantwriter to help the Association with achieving these goals. As a matter of coincidence, around that time the General Manager had interviewed a couple for residency eligibility at Hacienda Carmel, and recalled that the one of this couple, Cheryl Einsele, had stated that she was a professional grantwriter. This led to an inquiry by the Committee to see if Ms. Einsele would be interested in helping in this regard, and a meeting with her was arranged by the General Manager with the Committee. This meeting was held, and it was agreed that Ms. Einsele would contract with the Association on favorable terms to do this work.

Accordingly, on March 1, 2022 the Association entered into a one-year contract with Candela Content, Ms. Einsele's business. Among the stated terms of the contract was reviewing "Hacienda Carmel's grants management strategy, add additional funding opportunities, and share strategy as needed to achieve Hacienda Carmel's financial goals." The contract further provided that Candela Content would "create a grant plan," would "determine Hacienda Carmel's ability to submit grants and establish any necessary items, *i.e.*, a SAM account with the Federal government, budgets, *etc.*," would "research funding opportunities, evaluate and rank funders according to the likelihood of success, discuss opportunities with Hacienda Carmel's fire mitigation team," and would provide other assistance including discussion with funders and suggesting stewardship, *etc.*, as outlined on the contract's attached Scope of Work. At the end of the contract term of April 30, 2022, the contract was not renewed per the decision of Ms. Einsele.

During that time, however, a matching grant in the amount of \$24,000 was awarded to the Association for wildfire fuel reduction by the Cypress Fire Protection District during its 2022-23 grant cycle. This grant was awarded due to the Committee's grant application which required significant preparation, and the following year in the 2023-24 grant cycle the Association was awarded a \$40,000 matching grant from the District following an equal amount of grant application preparation. While these grants are most useful to have been awarded, and grants for which the Association will continue to apply on an annual basis going forward, the need for continuing to acquire additional and perhaps larger grants to implement the horticultural or Landscape Master Plan, produced by Rana The Cohabit Company, remains. This is so because of the substantial projected costs of bringing the interior spaces of Hacienda Carmel into acceptable wildfire safety standards and legal compliance which, without such additional revenues, would be a strain on the regular annual operating budget and reserve allocations of the Association.

(4) <u>The Committee recommends that planning be undertaken to begin work on</u> the 'Actions Achievable Long Range,' which are generally more labor intensive and than the Short Term actions, and will require sustained management and investment. (page 19).

This planning took the form of first developing a "Master Vegetation and Planting Design Plan" necessary to use in replacing the hazardous vegetation that requires removal under the law, and which was recommended in the 2021 Report at page 13, where it states that "To aid in this long term work it would be most helpful for the HCCA to have a comprehensive landscape plan, including a planting policy, based on best horticultural practices and principles of Firewise landscaping for this area." This proposed landscape plan was prompted by a recommendation made by the Association's insurance broker HUB International, whose fire-mitigation specialist, Irene Damsky, recommended on page 6 of her January 11, 2022 Report to the Association that it develop "a well-spaced vegetation plan."

Work began in earnest at the July of 2022 meeting of FRAM Committee on this plan as a "necessary element" of the HCCA's Long Term project of removing hazardous fire-risk vegetation. By September 2022 the HCCA had received three bids from landscape designers to develop the Landscape Master Plan. By November, Rana The Cohabit Company ("Rana Creek") was the company that had been selected, and among their first tasks in the preparation of the Master Plan was a meeting they organized between the President, the General Manager, David Mora, and Chairs of the Architectural Review and FRAM Committees and some of their members. After further investigation of the HCCA's grounds and needs, the Master Plan gradually took shape, and drafts were submitted to the FRAM Committee. By March Rana Creek was ready to make a presentation of its draft Master Plan, with video, to the entire Membership of the HCCA. That meeting was held on March 29, 2023 at Casa Fiesta, was well attended, and included a Q&A session in which Residents were able to provide input and feedback.

Following the March 29 presentation meeting were two separate Special Meetings called by a percentage of the Membership on current and future expenditures in implementing the Master Plan. These Special Meetings were held on May 15, 2023, and again on July 19, 2023. After these three meetings open to the membership, together with more than 2½ years of planning, reporting, and deliberations on the Landscape Master Plan, the Board of Directors considered adoption of the Master Plan at its regular monthly meeting on August 24, 2023. At that meeting, following a motion, the Board of Directors formally approved and adopted the Rana Creek Landscape Master Plan as its guide for future use in applying the best horticultural practices and principles of economy, aesthetics, and Firewise landscaping for this Community.

(5) <u>The Committee emphasizes here its Recommendation to the Board</u> <u>that application should be made to have the HCCA achieve the status of a certified</u> <u>Firewise USA site.</u> (p. 19)

Soon after the adoption of the 2021 Report, the FRAM Committee set to work to apply for and ultimately to achieve the coveted national Firewise USA certification. Due to the diligent and committee efforts of the Committee members, the necessary information–copious in volume–was gathered and various preliminary requirements were accomplished. This sizable effort included, for example, formation of a Firewise Board or Committee which, in our case, was the FRAM Committee; creation of a comprehensive wildfire risk assessment; development of a detailed action plan; establishment of an educational outreach plan to inform residents of the risks, and mitigation measures, surrounding wildland fires; and compilation of all this data with examples into the Firewise USA application form.

A supplemental requirement to the application process for a Firewise USA certification was the production of a "Firewise USA Application Three-year Action Plan," available from the HCCA's General Manager's office, which document is seven pages in length and details the steps the Association plans to take through the year 2024 in order to reduce and mitigate the risks of a catastrophic wildland fire at Hacienda Carmel. Though the HCCA's Firewise certification is valid

through 2024, when that time arrives the certification must be formally renewed. Upon submission of all these materials, reflecting a significant amount of work, there was a waiting period for processing our application by the Firewise USA personnel. In mid-March of 2022 the Association was notified that we successfully passed the application requirements, and within a short period of time the Association received its certificate of Firewise USA certification dated March 25, 2022. But to repeat, this certification is not static, in the sense that the Association must continue to maintain ongoing actions and educational outreach requirements in order to retain its certification, and report these actions to the national Firewise USA office.

Achieved Though Not Listed Among Short Term Actions

In the course of its work over the last 1½ years, the FRAM Committee accomplished a sizeable number of goals, several of which had by-products of bringing to the attention of its members matters closely related to wildfire mitigation that were important, though not included as specific goals or recommendations in its 2021 Report. The following are a few of the more significant of its "not listed" but voluntary accomplishments that ultimately further the protection and interests of the HCCA and its Members.

• <u>Screens on gable vents (not listed)</u>

On page 5 of her November 2021 Summary Report on the wildfire risks to Hacienda Carmel, HUB International's Irene Damsky noted under her section on "Wildfire Exposure Mapping Results" that "Firebrands or blowing embers are burning pieces of plant material that can drop onto combustible plants and debris, or lodge into vents and crevices on the dwelling structures. These burning pieces of vegetation then heat and ignite the surrounding materials, subsequently starting a new spot fire." Given that all the buildings owned by the HCCA have large air vents in the gables, often four to a building, the FRAM Committee decided that even though this was not a specific recommendation, it would nonetheless be relatively inexpensive and substantially prudent to correct this risk.

This was first discussed at the Committee's March 2022 meeting, where it was decided that the Committee's Chair would move the Board at its March 2022 meeting to authorize the installation of 1/16th-inch metal mesh screen over the air vents on the Community's buildings. Thereafter, at the FRAM Committee's meeting of Wednesday, April 20, 2022 the members were shown a new aluminum

exterior building vent by the General Manager that has a fire-mitigation "ember catching" screen built onto it. The Committee was informed that replacement of the old non-screened metal vents with the new screened vents on all 81 of the HCCA's buildings was under way through the labors of the Maintenance Crew. The installation of all these vents proceeded gradually as time permitted, but by May of 2023 a total of 194 mesh-screened vents had been replaced on the HCCA's buildings, at a cost of \$7,465.57 which was paid from the Reserve Fund allocation for fire mitigation work.

• New HCCA site map showing all 4 parcels (not listed)

In the wake of the Committee's research to identify the HCCA's legal easements and rights-of-way for ingress and egress to and from Hacienda Carmel, four original deeds were located in the Monterey County's records. These deeds conveyed, both through the developer Alcan Pacific Corporation, and directly to the HCCA, its current land holdings from four discrete parcels. In addition to circumscribing the parcels in surveyor's courses and bearings, three of the deeds also listed one or more rights-of-way running with the land described in the deed.

During the Committee's deliberations on rights-of-way and ingress/egress arising from this new wealth of land records, the idea was proffered-informally at first-that perhaps the existing maps of Hacienda Carmel should be updated to include *all* its parcels, since the maps in use only showed two of the four parcels in their entirety. There was an immediate consensus among the Committee members that this idea was a good one, and so with authorization from the Board of Directors the Committee entered into consultations with Ward Engineers (formerly Bestor Engineers) to produce such an upgraded and inclusive map of Hacienda Carmel. The final of that new site map was presented to the FRAM Committee at its meeting of August 9, 2023, when the Committee agreed to recommend its approval and adoption of the final map to the Board of Directors, together with an allowance not to exceed \$1,200 for printing and framing two wall-hanging display maps. This approval of the Board of Directors occurred on August 24, 2023.

• Fuel reduction grant and elimination of woodpile (not listed)

In June of 2022, the HCCA submitted through the FRAM Committee an application to the Cypress Fire Protection District for a \$12,000 grant, to be matched by the HCCA (a \$24,000 "matching grant"), being awarded to applicants

with a need to conduct wildfire "fuel reduction" work on their premises. The awards for the year-long grants were announced by the District in August of that year, and the HCCA succeeded in winning this matching grant, requiring an expenditure on its part of half the matching grant award, or \$12,000, while the District then matched that expenditure with \$12,000 provided to the HCCA.

Through the 2022-23 grant term, the HCCA spent some of these funds on extensive tree limbing and removal work on the West End parcel, contracting with Lopez Tree Service to do this fire fuel reduction job that was completed in August of 2022. In March of 2023 the HCCA then hired Bleck Fire Protection to bring a forest masticator on site in order to masticate a sizeable pile of old dried logs-tree limbs and tree trunk pieces-that had been stored on the West End not just for years, but for decades, and constituted a significant fire hazard. This work was done over the course of a week, and at the end, not only was a large amount of fire fuel reduced, but the wood chips left by the masticator were evenly spread over the entire site which transformed the appearance of formerly overgrown log piles into one that is park-like and attractive.

The final fuel reduction work under the 2022-23 Cypress Fire District grant was undertaken on June 12, 2023, again through Lopez Tree Service, which was to reduce the fire fuel in the southwest corner of Hacienda Carmel by widening and strengthening the firebreak there between the HCCA's property and that of the Quail Corporation. This area arguably constitutes the most vulnerable point in the Community where a wildland fire might penetrate the perimeter of its property and begin burning the interior vegetation and buildings. This two-day job was completed June 13, 2023, only days before the HCCA filed its second application to the Cypress Fire District for a fuel-reduction grant to be used in the 2023-24 grant cycle.

Conclusion: Landscape Master Plan & Actions Achievable Long Range

(4) The Committee recommends that planning be undertaken to begin work on the "Actions Achievable Long Range," which are generally more labor intensive than the Short Term actions and will require sustained management and investment. Unlike most of the Short Term actions which are one-time efforts, the Long Range actions are on-going, and will need to be integrated into the Grounds staff's regular work schedules. Moreover, the Long Range actions to some extent bear more similarity to the actions required by the Firewise USA certification process as that relates to continued hardscaping, vertical and horizontal vegetation spacing and distancing, and elimination of continuous tree canopies, which circumstances should be included in the Board's planning as recommended. (2021 Report, p. 19)

So stated the FRAM Committee's 2021 Report to the Board, and the Long Range "planning" referred to above achieved fruition in the form of the Rana Creek Landscape Master Plan that was finalized in April 2023, and which is discussed in detail above. This Master Plan can be seen as the *hinge* that connects the nowachieved Short Term actions to the yet-unachieved Long Range actions, simply because the Short Term actions have all been achieved, with the exception noted, and are now in the past. It therefore only remains to implement the Long Range actions that lie ahead, in the future, which are fundamentally set forth in detail in the Master Plan that will serve as the Association's "blueprint" for filling the empty spaces created by the necessary removal of hazardous vegetation.

A tremendous amount of vegetation and overgrowth that violates both State law and the Firewise USA guidelines due to its close proximity to buildings and to other vegetation needs to be removed from within the Hacienda Carmel berm in order to bring it into compliance and make our Community safer, and which will also save money in the long run. What the Master Plan provides is a complete guide or roadmap that the HCCA can use to re-plant the bare areas created from removal of this violative vegetation with replacement native or indigenous vegetation, which is also drought resistant (for water savings), fire resistant (for safety improvement), and labor non-intensive (for monetary savings owing to less upkeep). It is also designed to be visually attractive vegetation, to comply with the Community's shared aesthetic values.

But this vegetative transition will not be inexpensive. Originally, and as part of the early effort to obtain the services of a grantwriter as described above, there was a hope among the FRAM Committee members that grants applied for might be awarded to the HCCA in order to pay for most if not all of these Long Range goals. While that still may be possible, at least in part, it may be that the funding must instead be derived from the HCCA reserve account allocations, or even its operating accounts. The difference between these two sources-external grant funding or internal revenue funding-will have a direct impact on the duration of achieving the Long Range goals and implementation of the Master Plan. With sufficient external funding Hacienda Carmel could be completely renovated into an attractive fire-safe and fire-wise location in a relatively short period of time. Alternatively, if no external funding is ever obtained, this process of renovation might take years of spending small amounts each year to make slow but steady progress. In any event, time-and some further effort to identify external funding sources-will tell which of these courses the HCCA may have to take.

In the final analysis, the numerous Short Term goals or actions achievable in the HCCA's adopted 2021 Report have now been achieved. And the "hinge' action that joins those achieved Short Term actions to the future Long Range actions is implementation of the Landscape Master Plan, which has also been finalized and adopted. Accordingly, the future of fire-risk mitigation for the HCCA will now be a matter of removal of all violative vegetation inside the berm of Hacienda Carmel, together with continued wildfire fuel reduction in the West End, and ongoing fuel reduction along the berm's outside perimeter. Once removed from inside the berm, the replacement of vegetation, mulch, and other non-flammable adornment can be installed according to the intelligent planning set forth in the Landscape Master Plan, and upon the completion of these Long Range goals and actions, Hacienda Carmel should be far more able to successfully defend itself from the terrible effects of catastrophic wildland fires.