

OFFICE OF THE FIRE MARSHAL

SANTA CRUZ COUNTY FIRE DEPARTMENT / CAL FIRE

CAL FIRE

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JOHN FERREIRA
FIRE CHIEF

May 11, 2009

Building, Accessibility, and Fire Code Appeals Board
701 Ocean Street
Santa Cruz, CA 95060

Subject: Casa del Mare, LLC Appeal

Members of the Board:

On May 4th, 2009, The Santa Cruz County Fire Marshals Office accepted an appeal by Steven Graves for Casa del Mare, LLC (*Attachment 1*) of the requirement by the Fire Marshals Office that a turnout is required along Sunset Drive, accessing the small subdivision, at or within the first 500 feet of the road from the State Park kiosk. This requirement is part of building permit application #67647H (APN 046-173-02) for 44 Sunset Drive.

Background

In December 2008 Steven Graves and Associates applied for a building permit for 44 Sunset Drive in Watsonville. The project description is: Construct a 1,545 square foot replacement single family dwelling with one bedroom, two and a half bath, family/great room, living room, dining area, storage closet, 608 square feet of decks, an 255 square foot attached garage with laundry area, and 1,024 square feet of unconditioned/unenclosed area below the single family dwelling.

Building Permit Review

(First Review) Building permit Application 67647H was submitted on December 10th, 2008 and the 2007 California Fire Code with the current local amendments is in effect for this project. The first review of this project was completed by the Fire Marshals Office on December 18th, 2008 (first routing) and deficiency notes were forwarded to the building department identifying several items that needed to be addressed. The notes for the road requirements were:

1. Add the appropriate notes and details showing this information on your plans and resubmit, with an annotated copy of this letter.
2. The access road shall be in place to the following standards prior to any framing construction, or construction will be stopped:

The access road surface shall be "all weather," a minimum 6" of compacted aggregate base rock, class 2 or equivalent, certified by a licensed engineer to 95% compaction and shall be maintained.

ALL WEATHER SURFACE: Shall be a minimum of 6" of compacted Class 2 base rock for grades up to and including 5%, oil and screened for grades up to and including 15% and asphaltic concrete for grades exceeding 15%, but in no case exceeding 20%.

The maximum grade of the access road shall not exceed 20%, with grades greater than 15% not permitted for distances of more than 200 feet at a time.

The access road shall have a vertical clearance of 14 feet for its entire width and length, including turnouts.

Drainage details for the road or driveway shall conform to current engineering practices, including erosion control measures.

All private access roads, driveways, turn-arounds and bridges are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.

The access road shall be 18 feet minimum width and maximum 20% slope. (emphasis added)

On March 2nd, 2009 Fire Chief John Ferreira and Deputy Fire Marshal Chris Walters visited the site to review the road conditions.

The conditions found were: The private road (Sunset Drive) from the State Parks kiosk to the project site (44 Sunset Drive) is approximately 1000 feet long. This road is between 12 feet (most portions) and 18 feet wide (only in the undersized turnouts and road intersections). Within the first 750 feet (approximately) of travel, the turnouts do not meet the 12 foot wide by 35 foot long requirements. Also noted was a newly added secondary access/egress road from this community across State Park land to the State Park beach access road. This road had woodchips on it but could not be considered all weather.

During the week of March 9th, 2009 Fire Chief John Ferreira spoke with Mrs. Camas Steinmetz (attorney for applicants) and discussed the access road (Sunset Drive) conditions and the possibility of improving the secondary access/egress road.

During the week of March 16th, 2009 Deputy Fire Marshal Chris Walters contacted State Parks to determine the feasibility of making the secondary access/egress road all weather (base rock) and to formalize an agreement to use this secondary road for emergency evacuations. State Parks would not formalize an agreement nor would they allow the secondary access/egress road to be made all weather (base rock). State Parks informed us that the main access

road (Sunset Drive) was on an existing 40 foot wide easement which would allow for road improvements.

In an email dated March 16th, 2009 (*Attachment 2*) from Mrs. Steinmetz to Chief Ferreira, Mrs. Steinmetz acknowledged that "the existing turnouts on Sunset Drive may not meet the recommended standard which is 12ft. by 35ft. long."

In the letter dated March 19th, 2009 (*Attachment 3*) Chief Ferreira summarized his conversation with Mrs. Steinmetz and agreed that an 18 foot wide road might be "environmentally inadvisable" and the applicants could apply the "standard alternative" requiring the improvement of one (1) turnout every 500 feet along a 12 foot wide road. A copy was faxed to Mrs. Steinmetz of the Fire Chiefs Association of Santa Cruz County Fire Prevention Standard # 013 (Titled Turnouts). (*Attachment 4*) This standard details the measurements of an acceptable turnout and is used throughout Santa Cruz County.

(Second Review) Steven Graves and Associates resubmitted on March 26th, 2009. The second review of this project was completed by the Fire Marshals Office on March 31st, 2009 (second routing). The applicant had not addressed the road issues that were noted in the first routing or as a product of the discussions and emails with Mrs. Camas Steinmetz, nor had they included plans or drawings detailing the existing road. The second set of deficiency notes were forwarded to the building department and contained the same language as the first review.

In the letter dated April 2nd, 2009 (*Attachment 5*) Chief Ferreira reiterated the fire access road requirements and confirmed that the distance from the start of the road at the State Park kiosk (Sunset Drive) to the first full sized turnout (748 feet by Mr. Graves measurement) is an unacceptable distance and the applicants would need to improve one (1) of the existing turnouts at or within the first 500 feet in order to apply the 12 foot wide exception.

(Third Review) Steven Graves and Associates resubmitted on April 4th, 2009. The third review of this project was completed by the Fire Marshals Office on April 14th, 2009 (third routing). The applicant had not addressed the road issues that were noted in the first and second routings nor had they included plans or drawings detailing the existing road. The third set of deficiency notes were forwarded to the building department and contained similar language as the first and second reviews with the addition of the paragraph below.

1. All requirements listed above must be met for an approval from CALFIRE/Santa Cruz County Fire.

An approved turnout must be located within the first 500 feet of the access road. A turnout is required if the requirements for an 18 foot wide road cannot be met. The dimensions of the turnout are 12 feet wide (this is in addition to a twelve foot wide access road) by thirty five feet long with a twenty foot ease in ease out. On the plans

dated 3/26/09 submitted to this office, there is a note indicating that the access road is to be 12' feet in width as per CDF conditions of approval letter dated 3/20/09. Upon further investigation and phone calls with the applicant, it was determined that no such letter exists. All fire requirements listed above must be met for an approval. All requirements for the driveway and access road per Santa Cruz County Fire Code must be met. (emphasis added)

Analysis of Appeal Issues

The requirement for a full sized turnout approximately every 500 feet along Sunset Drive is based upon provisions in the 2007 California Fire Code, Santa Cruz County Fire Code and affirmed by the 1994 Santa Cruz County General Plan.

2007 California Fire Code Requirements (Attachment 6)

101.2 Purpose.

The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, ***and to provide safety and assistance to fire fighters and emergency responders during emergency operations.*** (emphasis added)

101.3 Scope.

The provisions of this code shall apply to the construction, alteration, movement, enlargement, ***replacement***, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California. (emphasis added)

This code establishes regulations affecting or relating to buildings, structures, processes, premises and a reasonable degree of life and property safeguards regarding:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;
2. Conditions hazardous to life, property or public welfare in the use of, occupancy of buildings, structures, or premises;
3. Fire hazards in the buildings, structures, or on premises from use of, occupancy of, or operation;
4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.

SECTION 502 - DEFINITIONS

502.1 Definitions.

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

FIRE APPARATUS ACCESS ROAD. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway.

SECTION 503 - FIRE APPARATUS ACCESS ROADS

503.1 Where required.

Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

503.1.1 Buildings and facilities.

Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

Santa Cruz County Fire Code Requirements (Attachment 7)

7.92.501.3 Section 501.3 is amended--Construction documents.

Section 501.3 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

501.3 - Construction Documents. *Construction documents for proposed fire apparatus access, location of fire lanes and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.* (emphasis added) When grading work is needed for the access road(s) within the jurisdiction of Santa Cruz County, application for a grading permit shall be made with the Santa Cruz County Planning Department pursuant to the Santa Cruz County Grading Ordinance. Such Permits shall be reviewed by the Santa Cruz County

Environmental Coordinator as required.
(Ord. 4893 § 2 (part), 11/6/07)

7.92.503.2.1 Section 503.2.1 is amended--Dimensions.

Section 503.2.1 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

Section 503.2.1 - Dimensions. *Fire Apparatus access roads shall have an unobstructed width of not less than 20 feet (6,096 mm)* (emphasis added) except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4,115 mm).

EXCEPTIONS:

1. *Outside of the Urban Services Line as established by the County of Santa Cruz, access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures,* and 12 feet for an access road or driveway serving two or fewer habitable structures. ***Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with 12-foot wide by 35-foot long turnouts located approximately every 500 feet may be provided with the approval of the fire code official.*** (emphasis added)

(Ord. 4893 § 2 (part), 11/6/07)

Santa Cruz County General Plan (Attachment 8)

6.5.1 Access Standards

Require all new structures, including additions of more than 500 square feet, (emphasis added) to single- family dwellings on existing parcels of record, to provide an adequate road for fire protection in conformance with the following standards:

(a) *Access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures,* (emphasis added) and 12 feet for an access road or driveway serving two or fewer habitable structures. ***Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12- foot wide all-weather surface access road with 12- foot wide by 35- foot long turnouts located approximately every 500 feet may be provided with the approval of the Fire Chief.*** (emphasis added) Exceptions: Title 19

of the California Administrative Code, requires that access roads from every state governed building to a public street shall be all-weather hard-surface (suitable for use by fire apparatus) roadway not less than 20 feet in width. Such roadway shall be unobstructed and maintained only as access to the public street.

(b) *Obstruction of the road width, as required above, including the parking of vehicles, shall be prohibited, as required in the Uniform Fire Code.* (emphasis added)

Conclusion

These sections of fire code set forth the fire department access road standards for Santa Cruz County. The access road in question (Sunset Drive) is less than the required 18 feet wide. If the applicant would like to apply the "environmentally inadvisable" exception to the 18 foot wide road requirement there are four requirements that must be met:

1. The road must be no less than a 12 foot wide all weather surface.
2. Turnouts must be located at least every 500 feet.
3. Turnouts must be 12 foot wide by 35 feet long with a 20 foot ease-in and ease-out.
4. These exceptions must be approved by the Fire Chief.

Fire Chief's Comments for Specific Appeal Issues

1. Appellant asserts that "existing fire access complies with fire code intent" One of the purposes of the 2007 California Fire Code requirements is "...to establish the minimum requirements consistent with nationally recognized good practices to... and to provide safety and assistance to firefighters and emergency responders during emergency operations" (2007 Fire Code 101.2 PURPOSE). As such then, the intent of the road standards is to allow an access way wide enough to allow a fire engine and crew to have an unobstructed route to an emergency incident. The nationally recognized practice is for a 20' wide road. Santa Cruz County allows an 18' wide road in areas outside the "Urban Service Line" (7.92.503.2.1 EXCEPTIONS). In areas where even the 18' requirement can't be met, then the Fire Official may accept a 12' road as long as there are 12'x35' turnouts approximately every 500' to allow engines safe passage of other oncoming vehicles. Appellant's further assumption that "...only one turnout is required between the 985 feet stretch from 18 Sunset Drive... and the State Parks kiosk" would be accurate if that one properly sized turnout was about in the middle of the stretch, satisfying the "approximately 500'" standard. By appellant's provided measurements, the first qualifying area that would satisfy the 12'x35' requirement is not until 748' from the State Parks kiosk - 50% above the required standard which does not meet the "approximate" standard.

Appellant's further assumption that the two existing substandard turnouts within the first 500' of travel from the State Parks kiosk are only "slightly substandard" misrepresents the facts. By appellant's provided measurements, both turnouts are only 6' wide in parts which mean they only meet 50% of the required width.

Appellant assumes that in the case of two vehicles attempting to pass each other on a narrow road, that both vehicles will be able to safely and quickly maneuver to the farthest edge of either the roadway or the turnout and then goes on to say a total passing area of 18' "... is more than adequate for both a car and fire truck to pass...". This assumption fails to consider darkness, inclement weather, expediency, and operator skill, and communications between vehicle drivers during such exercises.

2. Appellant cites Environmental Inadvisability

Appellant states that State Parks has indicated that it would not permit work outside the existing right of way. It is our understanding that a 40' easement extends along the length of the road in question and that although there may be environmental concerns, the public and firefighter safety requirements of the County code can be met.

3. Arbitrary Application of the Fire Code

I am unaware of any submitted applications that initiated access changes or other mitigations in the Sunset Drive area since my appointment as the Fire Official authorized to approve exceptions (June, 2003).

4. Lack of Nexus and Rough Proportionality

These requirements are being made of the appellant as the applicant for a permit. The lack of an existing "road association" is not a cause for further or enhanced exception to the access standards of the Fire Code or County General Plan.

5. Undue Hardship and Delay

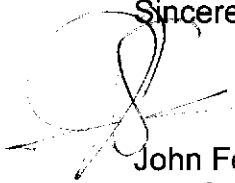
Cost and the difficulty of engineering requirements and construction are not cause for further or enhanced exception to the access standards of the Fire Code or County General Plan.

Summary

The authority to require a turnout at or within the first 500' of Sunset Drive exists in the 2007 California Fire Code sections referenced above and the Santa Cruz County Fire Code referenced above and is affirmed by the Santa Cruz County General Plan also referenced above. From the Deputy Fire Marshals perspective, allowing the building permit to proceed without requiring a full sized turnout in this section of road could expose the residents of 44 Sunset Drive to potential entrapment in the event of a natural disaster or delay of emergency response.

Therefore it is recommended that your board deny the appeal.

Sincerely,



John Ferreira
Fire Chief
Santa Cruz County Fire

Prepared by:



Chris Walters
Deputy Fire Marshal
Santa Cruz County Fire

Attachments:

1. Appeal letter from Steven Graves, dated April 30th, 2009
2. Email from Camas Steinmetz to Chief Ferreira, dated March 16th, 2009
3. Letter from Chief Ferreira to Camas Steinmetz, dated March 19th, 2009
4. Fire Chiefs Association of Santa Cruz County -Fire Prevention Standard #013
5. Letter from Chief Ferreira to Camas Steinmetz, dated April 2nd, 2009
6. 2007 California Fire Code requirements
7. Santa Cruz County Fire Code requirements
8. 1994 Santa Cruz County General Plan sections

April 30, 2009

BY HAND DELIVERY

Chief John Ferreira
County of Santa Cruz
County Fire Department
P.O. Drawer F-2/ 6059 Highway 9
Felton, CA 95018
Fax: (831) 335-4053

Re: NOTICE OF APPEAL of 4/07/09 Fire Department denial of building permit Application #67647H (APN 046-173-02) for 44 Sunset Drive, Watsonville CA.

Dear Chief Ferreira:

In accordance with Section 108.4.1 of the Santa Cruz County Fire Code, this letter is to notify you that our client, Casa del Mare, LLC, the owner of that certain property commonly known as 44 Sunset Drive, Watsonville in unincorporated Santa Cruz County (the "Property"), hereby appeals the Santa Cruz County Fire Department's denial of our building permit application #67647H. We received formal notice of this denial via a letter from the County Planning Department dated April 28, 2009. As you know, our client's building permit application seeks to replace in kind the deteriorating single family residence existing on the Property in accordance with the coastal development permit issued by the County of Santa Cruz last June (Applic. 07-0040). Our client had planned to begin construction immediately after the close of this year's rainy season.

The Fire Department comments enclosed with the Planning Department's letter of denial were not dated and were not updated since the last round of comments we received from the Fire Department in January. These comments, still indicate that "the access road shall be 18 feet minimum width".

However, our phone conversations and written communications in the recent weeks indicate your agreement that the 18 ft. access road width requirement is

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environmentally inadvisable in this case and therefore not applicable, Fire Code Section 503.2.1(1) governing access road dimensions provides in pertinent part:

1. Outside of the Urban Services Line as established by the County of Santa Cruz, access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with 12-foot wide by 35-foot long turnouts located **approximately** every 500 feet may be provided with the approval of the fire code official (emphasis added).

Pursuant to our phone conversations and your letter to me dated March 16, 2009 you confirmed your agreement that (1) it is environmentally inadvisable to widen Sunset Beach Drive to 18 feet and (2) Sunset Beach Drive currently meets the applicable 12 feet width alternative dimension.

Therefore, while not reflected in the stale comments from the Fire Department, we assume that you did not accept the building permit application this time not because of Sunset Drive's width, but because the two existing turnouts on Sunset Drive located on State Parks property within 500 feet of the State Parks' Sunset Beach kiosk each fall slightly short of the specifications recommended. As explained below, our client strongly disagrees that it should be required to improve – single handedly -- any of the existing turnouts on Sunset Drive as a condition to issuance of its building permit.

Our appeal of the Fire Department's denial is based on the following grounds:

1. Existing Fire Access Complies with Fire Code Intent

The existing access road width and turnouts meet the intent of Fire Code Section 503.2.1 by providing adequate fire access to serve the Property. Per Fire Code Section 503.2.1 and our consultant's measurements, only **one** turnout is required between the 985 feet stretch from 18 Sunset Drive where Sunset Drive meets the 18 foot standard width (per Fire Code Section 503.2.1) and the State Parks kiosk. Not one, but **four** turnouts currently exist between this stretch.

It is undisputed that the two turnouts closest to 44 Sunset Drive meet recommended code specifications (turnouts no. 3 and no. 4). Although we acknowledge that the specifications of the two turnouts within 50 feet of the State Parks kiosk (turnouts no. 1 and no. 2) and located on State Parks property are slightly

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substandard from what the code recommends for turnouts, they are each currently fully functional, allowing for a car (or fire truck) to pull over and a fire engine to pass. The average fire truck is 7-8 feet wide and the average large SUV/truck is about 6 feet wide. Therefore, as evidenced by the 18 foot road width standard in Section 503.2.1, 18 feet of width is more than adequate for both a car and fire truck to pass, or for two fire trucks to pass each other. Both lower turnouts increase Sunset Drive to at least 18 ft. in width (turnout out no. 2 increases the road width to 18-19 feet and turnout no. 1 increases the road to 18 - 22 feet).

Also, turnout no. 3, which you agree *does* meet the recommended turnout specifications (as does turnout no. 4), is only 740 feet from the State Parks parking area. It is important to note that the Fire Code uses the term "*approximately*" in reference to the 500 ft. intervals for turnouts, indicating that in some cases, turnouts can be more than 500 ft. apart. Here, the first 500 feet which contains the two turnouts that we are being asked to widen is completely visible from the beach parking lot below the kiosk. Therefore, if a fire truck were coming up or down the road, cars below it and above it would be able to see it and stop and wait for the fire truck to pass. Under these circumstances, we believe that the existing conditions fully satisfy the intent of Fire Code Section 503.2.1 and therefore, as Fire Chief, you have the discretion pursuant to Fire Code Section 102.8, to accept the existing road width and turnouts as-is -- without requiring any additional improvements.

2. Environmental Inadvisability

Widening either turnout no. 1 or no. 2 as the Fire Department is requiring is environmentally inadvisable. Attached to this Notice of Appeal are two reports -- one from an arborist and one from a soils engineer -- each concluding that it would be environmentally inadvisable to widen either of the two existing turnouts on State Parks property. The arborist states that the lower turnout could not be widened without removing a large healthy cypress tree. The soils engineer states that, because of steep slopes and loose, sandy soils, it would be extremely risky and costly to widen either turnout. Due to the steep topography and need for excessive grading in order to widen either turnout, it may not be feasible to keep all work within the existing right of way which has not been surveyed. State Parks has indicated that it would not permit work outside of the existing right of way.

3. Arbitrary Application of the Fire Code

In recent years, there have been several major remodeling projects in the Sunset Beach neighborhood and even construction of a single family residence from the

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ground up. Each of these homes, including the rest of the Sunset Beach neighborhood which consists of approximately 60 homes, is served by Sunset Drive as its sole access. From our review of County records on those properties in the neighborhood triggering Fire Department review and comment, fire access was never even raised by the Fire Department in its comments on these applications, let alone imposed as a condition of approval. The logical reason why fire access was never raised or imposed as a condition on these recent projects is because the existing four turnouts – obviously required by the Fire Department at some point in prior years – were considered adequate, and properly so. As such, we believe that requiring our client – and our client alone – to improve fire access as a condition of its building permit issuance constitutes an unfair, arbitrary and discriminatory action. If the existing turnouts were considered adequate previously, they should be deemed adequate now.

4. Lack of Nexus and Rough Proportionality

Our preliminary discussions with State Parks indicate that a construction permit would need to be approved and issued by the State in order to widen either turnout no. 1 or no. 2 and, as a condition of approval, the State would require our client to bear the burden of all repairs, maintenance and liability obligations associated with the improved turnout. Because there is no road or home owner's association governing road maintenance and repairs, our client would have to single handedly take on these obligations -- for the benefit of the entire Sunset Beach neighborhood! This is not only unfair and unreasonable, but arguably unconstitutional for lack of "nexus" and "rough proportionality". Our client would not only be footing the high cost to improve fire access serving the entire neighborhood of 60 plus residences, but it would have to take on the ongoing liability, repair and maintenance of these improvements, thereby freeing the other 60 plus homeowners to improve their properties without any cost, liability or obligation. See *Dolan v. City of Tigard* (1994) 512 U.S. 374, 391; see also *Erlach v. City of Culver City* (1996) 12 Cal. 4th 854

5. Undue Hardship and Delay

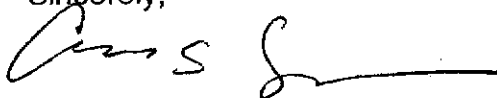
As discussed in the attached letter from the soils engineer, widening either turnout no. 1 or no. 2 would be a major improvement project, requiring surveying, civil engineering and additional geotechnical review and design services due to anticipated compaction requirements, extensive grading and retaining walls. At a minimum, permission from State Parks would need to be obtained along with a separate building permit and possibly a coastal development permit. Aside from the exorbitant cost of this major undertaking, the time involved in engineering the construction and obtaining the necessary approvals would eliminate our client's ability to build before the next rainy

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season, thereby resulting in undue hardship and a year long delay, exposing our client's failing residence to another year of winter rains.

Based on our prior communications and correspondence with you, we had hoped to avoid this unfortunate circumstance. However, in light of your decision, we must now look forward to a fair and just resolution of the matter before the Board of Appeals.

Sincerely,



Camas Steinmetz

Enc. (3)

cc: Jennifer Hutchinson, County Building Department
Supervisor Ellen Pirie
Dana McRae, County Counsel
Tom Burns, Planning Director
Robin Bolster, County Planning Department
Stephen Graves, Land Use Consultant
Captain Walters, Deputy Fire Marshall
Robin Kennedy, Esq.

20215402.3

Project No. SC9039
30 March 2009

JOANN FERGUSON AND
JOE MONTALBO
745 Cotton Street
Menlo Park, California 94025

Subject: Preliminary Geotechnical Evaluation

Reference: Proposed Sunset Drive Fire Department Turn-out Improvement
Ferguson/Montalbo Residence Replacement Project
APN 046-173-02
44 Sunset Drive
Watsonville, California

Dear Ms. Ferguson:

At your request of your planner, Mr. Stephen Graves, this letter presents our preliminary geotechnical evaluation of proposed widening of existing turn-outs at the entrance to Sunset Drive in Watsonville, California. We met with Mr. Graves and an arborist at the site on 25 March 2009 to observe the soil and topographic conditions and evaluate the feasibility of widening the turn-outs. We understand the size of the turn-outs required by the Fire Department would be 35 feet long by 12 feet wide (for a total pavement width of 24 feet).

The turn-outs are located on the north end of the Sunset Drive as the road climbs from the Sunset Beach picnic area parking lot to the subdivision at the top of the coastal dune. The lower turnout is on about 200 feet up the hill and the second is at the top of the 500 foot long (\pm) portion of Sunset Drive. The road has an average gradient of about 14 percent. The curved lower turnout is about 6 feet wide at each end and to 10 feet wide in the middle. The upper turn-out is about 6 feet wide.

Lower Turn-out

The lower turn-out is located on the west side of the road. The turn-out is curved, being 6 feet wide on the north and south ends and 10 feet wide in the middle. The soil observed on the surface of the road shoulder west of the turn-out is loose dune sand. At the widest portion of the turn-out, a 4 to 5 foot diameter heritage cypress tree is situated 2 feet from the edge of the asphalt. The tree appears to be in good health.

The shoulder on the east side of the turn-out has a 1½ to 2 feet high berm vegetated with thick ice plant adjacent to the asphalt road edge. The ice plant extends 10 to 15 feet to the east. The slope on the east side of the road shoulder descends to a level area. The edge of the road shoulder is about 2 feet above the level area on the north end of the turnout and 6 feet above the level area on the south end of the turn-out.

Project No. SC9039

Joann Ferguson

Joe Montalbo

44 Sunset Drive

30 March 2009

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The turn-out cannot be widened to the west without compacting aggregate base and subgrade soil and placing and compacting pavement. The turn-out will have a minimum structural section of 2 inches of asphalt, 8 inches of aggregate base compacted to a minimum of 95 percent relative compaction, and 8 inches of subgrade compacted to 95 percent. Ground disturbance associated with the grading would result in significant damage to tree roots near the ground surface and the heritage tree.

Since the west side of the lower turn-out cannot be widened without damage to the heritage cypress tree, constructing a turnout on the east side appears to be the only viable option. Creation of a turn-out on the east side will result in widening the road 14 feet to allow for the 12 foot turnout width and a 2 foot wide choker (road shoulders which should remain higher than subgrade). In addition, a buttress fill slope will be necessary on the outboard edge of the choker. An additional grading width of 4 to 12' feet would be required to excavate a keyway and bench and compact the loose fill soil underlying the existing road shoulder and a new buttress fill slope east of the turn-out. At the south end of the lower turnout, the rise of the road would result in the thickening and steepening of a buttress fill slope on the outboard edge of the turn-out. As an alternative to the buttress fill slope, a 2 to 4 foot high retaining wall will be necessary if a 2:1 fill slope cannot be constructed.

Upper turn-out

The existing upper turn-out on the east side of the road is presently about 6 feet wide. The west side of the road at that location is too close to the existing residence at 14 Sunset Drive and improvements to the residence located at 10 Sunset Drive and cannot be widened to construct a 12 foot wide turn-out.

At the edge of the existing turn-out on the east side of the road, a moderately steep slope descends to the east. At the south end of the turn-out, a high concrete retaining wall, which is the lower wall of a residence on the adjacent property at 17 Sunset Drive, steps down the slope. The slope surface is covered with thick wood chips and eucalyptus branches several feet deep. An erosion scar or landslide scarp was observed about 30' down slope of the road edge. It appears thick brush has been placed on the slope to reduce erosion damage or soften the steepness of the eroded or sliding slope.

The only way to widen the upper turn-out would be to extend the outer edge a minimum of 8 feet to achieve the required width plus a 2 foot choker. Since the site is moderately steep it will be necessary to extend the grading area 16 feet wider to construct the 2:1 buttress fill slope downslope of the turn-out. Construction of the fill slope may

Project No. SC9039
Joann Ferguson
Joe Montalbo
44 Sunset Drive
30 March 2009
Page 3

undermine the footings of the retaining wall on the 17 Sunset Drive property. A geotechnical study should be performed to evaluate the stability of the slope with respect to the turn-out widening project and evaluate the potential negative impacts of the project on the retaining wall foundation. The feasibility of construction of a buttress fill would be contingent upon the results of the study. As an alternative, a 6 to 8 foot high retaining wall will be necessary if a 2:1 fill slope cannot be constructed.


Conclusions

In summary, widening the turn-outs on Sunset Drive would be a major project. The grading area for the turn-outs will extend 18 to 24 feet east of the existing road edge if buttress fill slopes are constructed. Even if significant (up to 8 feet high) retaining walls were constructed, the widening for the turnouts would extend a minimum of 14 feet from the existing road edge for the lower turn-out and 8 feet from the existing road edge for the upper turn-out. A survey of the road would be necessary to determine whether the improvements could be completed within the existing 40 foot ROW (which may be problematic for both turnouts). In addition, geotechnical reports, topographic maps and improvement plans should be prepared to evaluate the soil conditions, feasibility and recommendation and requirements for the turn-out widening project. At the steeper upper turn-out, reports and maps may indicate a retaining wall is more appropriate.

If you have any questions concerning this letter, please contact our office. If you have any questions or comments, please contact our office.

Very truly yours,

HARO, KASUNICH & ASSOCIATES, INC.


Christopher A. George
C.E. 50871



CG/dk

Copies: 1 to Addressee
3 to Steve Graves



Ferguson

LEWIS TREE SERVICE, INC.

Quality Tree Care

(831) 476-1200

FAX (831) 476-1207

3135 Porter Street • Soquel, CA 95073



Arborist Certificate #WC1735
Calif. Contractor's License #755357
Fully Insured: General Liability
& Workman's Compensation

March 25, 2009

Stephen Graves and Associates
Attn: Stephen Graves
2735 Porter Street
Soquel, CA 95073

Dear Steve,

As per your request on 3/25/09, I inspected the site located on the ocean side of the roadway known as Sunset Drive, approximately 200' up from the parking area. It is my understanding that you are exploring the possibility of widening the turnout at this location.

As you know a large Monterey Cypress tree is located two feet from the existing edge of the pavement at the widest point at this turn out.

The general health and vigor of this multi-stemmed Monterey Cypress was rated as good based on foliage quality, quantity and annual shoot growth. The trees size was estimated at approximately 45' in height with an average canopy spread of at least 40 feet. The trunks diameter at breast height ranged from 20-34 inches.

There is a serious concern that the extent of soil excavation required to increase the turnout width would result in significant negative impacts to this tree. The structural stability may be substantially altered as a result of root loss as this tree is especially subject to on-shore winds.

Based on these findings, in the event that there is no alternative to widening of the roadway, at this location, it is my strong opinion that tree removal would be unavoidable.

If you should have any questions regarding the above information, please do not hesitate to give me a call.

Sincerely,
Nathan Lewis

President; Certified Arborist, License #WE-1735A
LEWIS TREE SERVICE, INC.

59 Sunset - New SFD

03/19/2009 14:52 8313351018 SANTA CRUZ PLANNING PAGE 03/14
15:28:18 Thu Mar 19, 2009

03/19/09 BS3 COUNTY OF SANTA CRUZ - ALUS 3.0 I-ALPER145
15:27:39 BUILDING APPLICATION SNAPSHOT ALSBR145

APPL.NO: 0046037H : APPL. DATE: 10/02/02 : EXPIRE DATE: 6/19/03 :
SITUS: 59 SUNSET DR WATSONVILLE : PARCEL : 046 172 12 :
OWNER: VAN TROOD RICHARD A M/M SS : STATUS: READY2ISSU :
CONTACT: VAN TROOD RICHARD A M/M SS : TYPE: RES :
: 12515 FOOTHILL AVENUE SAN MARTIN CA 95046 :

----- PROJECT DESCRIPTION -----
Construct 2-story SFD 2 bedroom, 3 bath, kitchen, dining room,
living room, family room, entry(foyer), storage, decks and attached garage.

INTAKE LOCATION: 6 APTOS

PLAN FORM: BLUEPRINTS :

03/19/2009 14:52 8313351018 SANTA CRUZ PLANNING PAGE 02/14
15:28:02 Thu Mar 19, 2009

03/19/09 XRS COUNTY OF SANTA CRUZ - ALUS 3.0 I-ALPSA110
15:27:12 CROSS-REF: APPS & PERMITS BY APN PAGE: 1 ALSSA110

APN: 04617212 INVESTIGATIONS?: RESOLVED
SITUS: 59 SUNSET DR, WATSONVILLE, 95076-9653 PARCEL NOTEBOOK?: YES
SPLIT/COMBOS?: NO

----- APPLICATION ----- PERMIT -----
SEL APPL NO STATUS PERM NO. CO ISSUED STATUS TYPE(S) PF11---->
1 0046037H READY2ISSU 00133547 12/20/02 FINALED SFD ESR
2 01-0282 APPROVED CZB EC3 EIE FAR HDP INB

03/19/2009 14:52 8313351018 SANTA CRUZ PLANNING PAGE 04/14
15:08:17 Thu Mar 19, 2009

03/19/09 BS5 COUNTY OF SANTA CRUZ - 3.0 I-ALPER205
15:05:13 BROWSE BUILDING APPLICATION REVIEW ALSBR740
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTY

APPL.NO.: 0046037H : REVIEW DATE: 12/04/02 : ROUTING: 2
DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: CLB
COMMENTS: ----- PF4 TO SEE RELATED INFORMATION.

DEPARTMENT NAME: CDF/COUNTY FIRE

Add the appropriate NOTES and DETAILS showing this information on your plans and RESUBMIT, with an annotated copy of this letter:
Note on the plans that these plans are in compliance with California Building and Fire Codes (1997) as amended by the authority having jurisdiction.

Each APN (lot) shall have separate submittals for building and sprinkler system plans.

The job copies of the building and fire systems plans and permits must be onsite during inspections.

NOTE on the plans the OCCUPANCY CLASSIFICATION, BUILDING CONSTRUCTION TYPE/FIRE RATING and SPRINKLERED or NONSPRINKLERED as determined by the

PF7/8=PREV/NXT AGCY 10/11=PAGE COMM THIS RTNG 12/13=OTHER RTNGS-THIS AGCY
PF19=PREVIOUS SCREEN PA2=EXIT

10

59 SUNSET

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SANTA CRUZ PLANNING

PAGE 05/14

15:08:56 Thu Mar 19, 2009

03/19/09 BS5
15:08:17

COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTY

I-ALPBR205
ALSBR740

APPL.NO.: 0046037H : REVIEW DATE: 12/04/02 : ROUTING: 2
DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: CLB

COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

building official and outlined in Part IV of the California Building Code,
e.g. R-3, Type V-N, Sprinklered.
Fire hydrant shall be painted in accordance with the state of California
Health and Safety Code. See authority having jurisdiction.
A minimum fire flow 200 GPM is required from 1 hydrant located
within 150 feet.

SHOW on the plans a 4,000 gallon water tank for fire protection with a
"fire hydrant" as located and approved by the Fire Department if your
building is not serviced by a public water supply meeting fire flow
requirements. For information regarding where the water tank and fire
department connection should be located, contact the fire department in
your jurisdiction.

PF7/8=PREV/NXT AGCY 10/11=PAGE COMM THIS RTNG 12/13=OTHER RTNGS-THIS AGCY

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SANTA CRUZ PLANNING

PAGE 06/14

15:09:57 Thu Mar 19, 2009

03/19/09 BS5
15:09:18

COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTY

I-ALPBR205
ALSBR740

APPL.NO.: 0046037H : REVIEW DATE: 12/04/02 : ROUTING: 2
DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: CLB

COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

NOTE on the plans that the building shall be protected by an approved
automatic fire sprinkler system complying with the currently adopted
edition of NFPA 13D and Chapter 35 of California Building Code
and adopted standards of the authority having jurisdiction.
NOTE that the designer/installer shall submit three (3) sets of plans
and calculations for the underground and overhead Residential Automatic
Fire Sprinkler System to this agency for approval. Installation shall
follow our guide sheet.
NOTE on the plans that an UNDERGROUND FIRE PROTECTION SYSTEM WORKING
DRAWING must be prepared by the designer/installer. The plans shall
comply with the UNDERGROUND FIRE PROTECTION SYSTEM INSTALLATION POLICY
HANDOUT.

PF7/8=PREV/NXT AGCY 10/11=PAGE COMM THIS RTNG 12/13=OTHER RTNGS-THIS AGCY

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91 SUNSET - MAJOR REMODEL

03/19/2009 14:52

8313351018

SANTA CRUZ PLANNING

PAGE 08/14

15:19:58 Thu Mar 19, 2009

03/19/09 BS3
15:19:12

COUNTY OF SANTA CRUZ - ALUS 3.0
BUILDING APPLICATION SNAPSHOT

I-ALPBR145
ALSBR145

APPL.NO: 0048885G : APPL. DATE: 4/30/03 : EXPIRE DATE: 3/18/04 :
SITUS: 91 SUNSET DR WATSONVILLE : PARCEL : 046 183 17 :
OWNER: CARR CALVIN B & JENNIFER H/W CP : STATUS: READY2ISSU :
CONTACT: BOONE/LOW ARCHITECTS AND PLANNING : TYPE: RES :
: 157 VAN NESS AVE. SANTA CRUZ CA 95060- :
----- PROJECT DESCRIPTION -----

Construct room addition to extend mechanical room under existing deck.
Recognize an existing kitchen and bedroom expansion, enclosure of portion a carport to entry and utility room, removal of conversion of carport to office and convert back to carport for two vehicles, replace deck railing to comply with Uniform Building

INTAKE LOCATION: 8 APTOS :
SPECIAL PROGRAM: NONE : PLAN FORM: BLUEPRINTS :
PRIORITY APPLICATION?: N : PRIORITY REASON: :
ROUTING REQUIRED?: Y : EST TIME OF FIRST REVIEW: 8 WEEKS :
APPL. PLANS PURGED?: Y 2/01/05 : STAFF INITIALS: JMV : INTAKE: CML :
ALL DATA HAS BEEN DISPLAYED PFG-DESC FORWARD KEY NEW NUMBER PA2-EXIT

03/19/2009 14:52

8313351018

SANTA CRUZ PLANNING

PAGE 09/14

15:20:08 Thu Mar 19, 2009

03/19/09 BS5
15:19:29

COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTY

I-ALPBR205
ALSBR740

APPL.NO.: 0048085G : REVIEW DATE: 7/16/03 : ROUTING: 2
DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: JCM
COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

DEPARTMENT NAME: CDF/COUNTY FIRE

Add the appropriate NOTES and DETAILS showing this information on your plans and RESUBMIT, with an annotated copy of this letter:
Note on the plans that these plans are in compliance with California Building and Fire Codes (2001) as amended by the authority having jurisdiction.

Each APN (lot) shall have separate submittals for building and sprinkler system plans.

SHOW on the plans a public fire hydrant within 250 feet of any portion of the property, along the fire department access route, meeting the minimum required fire flow for the building. This information can be obtained from the water company.

12/12-OTHER STINGS-THIS AGCY

03/19/2009 14:52

8313351018

SANTA CRUZ PLANNING

PAGE 10/14

15:20:09 Thu Mar 19, 2009

03/19/09 BS5
15:19:31

COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTY

I-ALPBR205
ALSBR740

APPL.NO.: 0048085G : REVIEW DATE: 7/16/03 : ROUTING: 2
DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: JCM
COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

Building numbers shall be provided. Numbers shall be a minimum of 4 inches in height on a contrasting background and visible from the street, additional numbers shall be installed on a directional sign at the property driveway and street.

NOTE on the plans that a 30 foot clearance will be maintained with non-combustible vegetation around all structures or to the property line (whichever is a shorter distance). Single specimens of trees, ornamental shrubbery or similar plants used as ground covers, provided they do not form a means of rapidly transmitting fire from native growth to any structure are exempt.

SHOW on the plans, DETAILS of compliance with the driveway requirements. The driveway shall be 12 feet minimum width and maximum twenty percent

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91 SUNSET

03/19/2009 14:52 8313351018

SANTA CRUZ PLANNING

PAGE 12/14

15:20:10 Thu Mar 19, 2009

03/19/09 BS5
15:19:32COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTYI-ALPBR205
ALSBR740

APPL.NO.: 0048085G : REVIEW DATE: 7/16/03 : ROUTING: 2
 DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: JCM
 COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

slope.
 The driveway shall be in place to the following standards prior to any framing construction, or construction will be stopped:

- The driveway surface shall be "all weather", a minimum 6" of compacted aggregate base rock, Class 2 or equivalent certified by a licensed engineer to 95% compaction and shall be maintained.
- ALL WEATHER SURFACE: shall be a minimum of 6" of compacted Class II base rock for grades up to and including 5%, oil and screened for grades up to and including 15% and asphaltic concrete for grades exceeding 15%, but in no case exceeding 20%.
- The maximum grade of the driveway shall not exceed 20%, with grades of 15% not permitted for distances of more than 200 feet at a time.

 10/11=PAGE COMM THIS RTNG 12/13=OTHER RTNGS-THIS AGCY

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SANTA CRUZ PLANNING

PAGE 13/14

15:20:11 Thu Mar 19, 2009

03/19/09 BS5
15:19:33COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTYI-ALPBR205
ALSBR740

APPL.NO.: 0048085G : REVIEW DATE: 7/16/03 : ROUTING: 2
 DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: JCM
 COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

- The driveway shall have an overhead clearance of 14 feet vertical distance for its entire width.
- A turn-around area which meets the requirements of the fire department shall be provided for access roads and driveways in excess of 150 feet in length.
- Drainage details for the road or driveway shall conform to current engineering practices, including erosion control measures.
- All private access roads, driveways, turn-arounds and bridges are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.
- The driveway shall be thereafter maintained to these standards

 PF7/8=PREV/EXT AGCY 10/11=PAGE COMM THIS RTNG 12/13=OTHER RTNGS-THIS AGCY

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SANTA CRUZ PLANNING

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15:20:13 Thu Mar 19, 2009

03/19/09 BS5
15:19:36COUNTY OF SANTA CRUZ - 3.0
BROWSE BUILDING APPLICATION REVIEW
REVIEW AGENCY: CAL DEPT FORESTRY/COUNTYI-ALPBR205
ALSBR740

APPL.NO.: 0048085G : REVIEW DATE: 7/16/03 : ROUTING: 2
 DETERMINATION: APPROVED : REVIEW TIME: : REVIEWER: JCM
 COMMENTS:----- PF4 TO SEE RELATED INFORMATION.

source, and, to hold harmless and without prejudice, the reviewing agency.
 IF YOUR HOME IS ON A PUBLIC WATER SYSTEM, SHOW PUBLIC FIRE HYDRANT ON PLANS. IF YOUR HOME IS ON A PRIVATE WATER SYSTEM, INSTALLATION OF A PRIVATE FIRE HYDRANT AND 4,000 GALLON WATER TANK IS REQUIRED AND SHALL BE SHOWN ON PLANS. IF YOU DRIVEWAY SERVES MORE THAN TWO HOMES, THE MINIMUM WIDTH IS EIGHTEEN FEET. SHOW ON PLANS ALL SQUARE FOOTAGE, NEW AND EXISTING INCLUDING ALL DECKS, GARAGES AND CARPORTS. FAILURE TO LIST ALL ITEMS NOTED ABOVE ON PLANS WILL RESULT IN FURTHER DENIAL OF PLANS.]*

10

Walters, Chris

From: Steinmetz, Camas [CSteinmetz@manatt.com]
Sent: Tuesday, March 17, 2009 10:08 AM
To: Steinmetz, Camas; Ferreira, John
Cc: Ferguson, Joann; Joe Montalbo; Stephen Graves and Asso.; Walters, Chris
Subject: RE: 44 Sunset Dr. - fire access update

For the record, please note that per Section 503.2.1 of the Fire Code, the term "environmentally infeasible" in the last sentence of the first paragraph below should be replaced with the term "environmentally inadvisable." Thank you.

Camas

From: Steinmetz, Camas
Sent: Monday, March 16, 2009 12:29 PM
To: 'john.ferreira@fire.ca.gov'
Cc: Ferguson, Joann; Joe Montalbo; 'Stephen Graves and Asso.'; 'chris.walters@fire.ca.gov'
Subject: 44 Sunset Dr. - fire access update

Dear Chief Ferreira,

I wanted to follow up on our phone call last week and thank both you and Captain Walters for taking the time that you have in addressing our concerns regarding fire access requirements for my clients, Joann Ferguson and Joe Montalbo, at 44 Sunset Drive (Building Permit #67647). My clients were relieved to hear that you agreed that widening Sunset Drive to 18 ft. pursuant to Fire Code Section 503.2.1 was infeasible and would not be required for their project. As an alternative to this standard, you said that you and Mr. Walters were going to engage State Parks to see if the chipped pathway connecting Mesa Rd. to Shell Rd. could be improved as a secondary fire road access. When I mentioned that a 12 ft. wide access road with turnouts is the standard alternative when an 18 ft. wide access road is environmentally infeasible -- and this alternative standard was all that was required by Cal Fire's February, 2007 comments on my clients' coastal development permit application -- you expressed concern that although the Sunset Drive is 12 ft. wide, the existing turnouts on Sunset Drive may not meet the recommended standard which is 12ft. by 35ft. long.

Turnouts

We believe that the existing turnouts on Sunset Drive meet or exceed the recommended alternative fire access standard set forth in Section 503.2.1 of the Fire Code and therefore no further improvements or secondary access should be required. Included below is an email from Stephen Graves, our land use consultant, who we asked to measure the existing road width and turnout dimensions in response to your concerns. Also attached are the photos that Mr. Graves took of each of these turnouts.

Per Mr. Grave's measurements, the distance between the State Park parking lot area and my clients' residence is 985 lineal feet. Therefore, per Fire Code Section 503.2.1 only **one** turnout should be required. As Mr. Graves discusses below, there are actually **four** fully functional turnouts between the State Park kiosk and the residence at 44 Sunset. Turnouts # 3 and #4 fully meet or exceed the standard dimensions of being 24 ft. wide (including the 12 ft. road) by 35ft long and therefore would not need to be improved to meet the standard turnout dimension recommended in Fire Code Section 503.2.1. While turnouts #1 and #2 (on State Park land coming up from the beach parking lot) fall slightly short of the recommended turnout dimension, they are wide enough to allow two cars to pass each other (they are 19' wide and 22'6" wide respectively, including the 12 ft. road). As evidenced by the attached photos, these two designated turnouts clearly were approved and/or recognized by Cal Fire in the past to accommodate other applicants. As shown in the attached photos, any widening of either of these first two turnouts would be environmentally inadvisable because the lower turnout (#1) is very close to a large cypress that would be negatively impacted by widening and the steep slopes would prohibit widening the upper turnout (#2). In addition, improving any of the four turnouts would be legally infeasible. Turnouts #1 and #2 are on state property and would require an easement (a disposition of state

property requiring a lengthy approval process) from the state to improve them. Turnouts #3 and #4 are on private property and would also require obtaining an easement from the owners, which my clients could not very well compel (as we discussed on the phone, each property owner in the subdivision owns the portion of Sunset Dr. from his or her property line to the center line of the road and there is no Road Association or other agreement or document governing widening or repairs).

Given these environmental and legal constraints and the fact that there are already four fully functioning turnouts as opposed to the single one turnout recommended by the Fire Code, we believe that the existing road and turnouts more than comply with the intent of Fire Code section 503.2.1 (governing fire access roads) and nothing further should be required.

Secondary Access

With respect to the contemplated secondary access, as Captain Walters is fully aware, the improvement of this access is already being pursued by the Community Emergency Response Team (CERT) and the voluntary Sunset Beach Improvement Association (SBIA). See page 2 of the attached SBIA newsletter. While my clients will of course cooperate with CERT and the SBIA to support any efforts that they make to improve the secondary access for the benefit of the entire 60 unit Sunset Beach neighborhood, we feel strongly that their replacement dwelling permit application cannot be conditioned upon this secondary access.

As I expressed to you in our phone conversation, Captain Walters informed my clients that he is the Cal Fire consultant for CERT and, therefore, he is well aware of their desire to improve this contemplated secondary access (as evidenced by his suggestion to you on your site visit that this access be improved by my clients as a building permit condition). As we also discussed, a few members of CERT vocally opposed our clients' project prior to its approval. These residents would be more than happy to see CERT's contemplated emergency access road imposed as a condition of approval on my clients, resulting in either (1) halting my clients' project altogether or (2) my clients fully funding their emergency access road to serve the entire 60 unit community. We therefore feel that this secondary access is being contemplated by Cal Fire as a result of an apparent conflict of interest between Captain Walters and my client's project.

This secondary access was not part of the discretionary approval of my clients' coastal development permit nor any comments submitted by Cal Fire and is not required by any County ordinances, including the Fire Code. As we discussed, it was also not included on the original 1929 subdivision map, and in fact, the majority of its contemplated length falls outside the boundaries of the subdivision itself. Aside from being legally infeasible because this contemplated secondary access is outside the ownership and control of my clients (it is owned by the State in part and by the adjoining property owners in part), this condition lacks the "essential nexus" and "rough proportionality" required under the California Constitution because it would require my clients to single handedly shoulder the burden of constructing and funding a secondary access road to serve an entire neighborhood of 60 residences. Furthermore, because many residences served by Sunset Drive have been substantially improved (and in one case constructed entirely from the ground up) without triggering these fire access improvements now being contemplated, we are concerned that, if imposed on my clients, Cal Fire would be enforcing its regulations arbitrarily, capriciously and discriminatorily.

In conclusion, we feel that Cal Fire's access concerns are addressed by the existing road width and turnouts on Sunset Drive as evidenced by Mr. Graves measurements below and the attached photos. Due to timeline pressures and constraints, we need to move forward with our building permit re-submittal which we have delayed for over 3 weeks trying in order to get clarification on and respond to Cal Fire's concerns. Therefore, please be advised that, once re-routed, Cal Fire will receive updated plan sets which contain the note that the access drive be 12 ft. in width per Cal Fire's original requirements set forth in its February, 2007 comments. We would greatly appreciate Cal Fire's approval of our project based upon all of the evidence which you and we have gathered with respect to this matter. If the building permit is again denied on the basis of fire access, my clients will have no choice but to appeal the denial to the Building and Fire Code Appeals Board. Hopefully we can all avoid this costly and time consuming process. Thank you again for your consideration. If you have any questions or would like to discuss, please do not hesitate to contact me.

Sincerely,

Camas J. Steinmetz
manatt | phelps | phillips
1001 Page Mill Road, Building 2
Palo Alto, CA 94304
tel: (650) 251-1455

4/2/2009

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direct fax: (650) 213-4602
csteinmetz@manatt.com

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From: Stephen Graves and Asso. [<mailto:steve@sgaconsulting.us>]
Sent: Wednesday, March 11, 2009 2:34 PM
To: Ferguson, Joann; Steinmetz, Camas
Subject: Additional measurements of access road for Sunset Drive

Hi Joann, Joe and Camas:

I understand that the Fire District has questioned whether the existing turnouts on Sunset Beach are adequate, particularly with respect to width. I went back out to the site today with tape measure and survey wheel and found the following:

There are 4 turnouts not including widened driveways and parking areas between the State Beach Parking area and the site (44 Sunset). Per my memo below and attached photos here are the dimensions:

Turnout #1 (at 200 ft.) – Paved width ranges from 18' min to 22'6" (including 12' wide access road). The length is 45'. This is clearly an improved turnout that was likely required and approved by the Fire Marshall's office in the past. It may be possible to improve this to a 24' width without major grading and/or retaining walls.

Turnout #2 (at 488 ft.) – Paved width is 19'. The turnout is 38' long. It would be difficult to improve this turnout to 24' but it could be done, may require a small retaining wall however. This turnout has signage stating "Turnout Only" and therefore like turnout #1 has likely been recognized by previous Fire Marshall's.

Turnout #3 (at 748 ft.) – Base rock width ranges from 26' to 39' in width. Length is 40'.

Turnout #4 – (at 855 ft.) Located in front of 16 Sunset, is paved and has a width of 25' and length of 41'. This area excludes the parking apron. This is located about 65' from that end of turnout #3.

Conclusion: The County's "Typical Turnout" diagram shows a 24' width (two 12' sections) and a length of 35'. It has been my experience that these are recommended dimensions and the Fire Marshall has the discretion to modify these dimensions when necessary due to site constraints. It is clear that the two turnouts on the steeper portion of the Sunset Drive were improved as Fire turnouts (one is marked as such the other would not need to be marked due to its location it would never be used as parking), and most likely were recognized or approved by other Fire Marshalls on past projects. It is my opinion that all four turnouts are functional and could be approved.

The project requirement is one turnout for every 500'. From the parking lot to 40 Sunset (where a 42' wide roadway exists in front of 40 and 44 Sunset – 20' parking apron and 22' wide road) the distance is 985 lineal feet. Technically only one turnout is necessary.

Call me if questions.

Stephen Graves
President

Stephen Graves & Associates
2735 Porter Street
Soquel, CA 95073
(831) 465-0677 x100

4/2/2009

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(831) 465-0678 Fax

Stephen Graves
President

Stephen Graves & Associates
2735 Porter Street
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(831) 465-0677 x100
(831) 465-0678 Fax

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4/2/2009

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County of Santa Cruz

COUNTY FIRE DEPARTMENT

P.O. DRAWER F-2, 6059 HIGHWAY 9, FELTON CA 95018

(831) 335-5353 FAX: (831) 335-4053 TDD: (831) 454-2123

JOHN FERREIRA, CHIEF

March 19, 2009

Ms. Camas J. Steinmetz
Manatt/Phelps/Phillips
1001 Page Mill Road, Building 2
Palo Alto, California 94304

Dear Ms. Steinmetz:

44 Sunset Drive (Ferguson/Montalbo), Watsonville, California

I appreciate your speaking with me yesterday (3/18) regards the letter we received from you concerning access to your clients' project. This letter summarizes our discussion.

You accurately describe our initial conversation of the previous week when I acknowledged the difficulties of widening the main access road (Sunset Drive) to 18 feet and that I suspected that the existing turnouts on Sunset Dr. did not meet the Santa Cruz County Code's dimensional requirements. During that call I told you that during a site inspection of the area, Captain Walters and I had noticed a freshly redwood-chipped pathway/roadway connecting Mesa Rd. to Shell Rd. and that he and I had visited the State Park's office to see if that could be used as a secondary ingress/egress to your clients' project and the community. In the interest of your clients, I considered that during an emergency, such a secondary travel route could ease congestion and allow emergency responders access on Sunset Drive and that that might be acceptable in lieu of the "standard alternative" requiring the improvement of 1 turnout every 500' along a 12' road.

Your belief that the existing turnouts meet or exceed the recommended alternatives is erroneous. The memo from Mr. Stephen Graves provided somewhat accurate measurements of the geographical situation. Mr. Graves infers that the code requires "one turnout **for** every 500'" (emphasis added) and that since his measured total distance of travel is 985', he surmises that only one turnout would be required. The code actually requires one turnout **every** 500'. On Thursday (March 19th), Captain Walters re-measured the area and determined that the total distance is 1,050' and that two turnouts will be required.

The turnout in front of 40 and 44 Sunset and/or the turnout at 748' along Mr. Graves' measured route satisfy the need for a turnout in the second 500' section of travel. Recognizing that an acceptable turnout would be required in the first 500' of the roadway (commencing at the beach parking area), then either Mr. Graves' cited Turnout #1 or #2 would need to be 12' wide and 35' long. By his measurements, neither Turnout #1 nor #2 is currently 12' wide along the entire 35' length nor does either meet the additional adopted standard that includes 20' long "ease in and ease out" space (diagrams faxed to you

Wednesday by FC Walters). Your opinion that Turnouts #1 & #2 are wide enough "for two **cars** to pass each other" (emphasis added) is irrelevant in that in this application, the turnouts are intended for a car and a fire engine to safely pass each other, a fire engine being significantly wider and longer than most passenger vehicles.

In your letter you mention that these roadways and turnouts were previously recognized as adequate. I can only tell you that during my term as County Fire Chief (6 years), the County Fire Marshal's Office has approved no projects in the Sunset Drive area that necessitated modifications of access. As for what may have been previously allowed, you must acknowledge that what might have been installed 100, 30 or even 10 years ago might not be acceptable now, particularly in the light of the community's growing desire for the protection of the environment and enhancement of public safety. It could also be that the size of these two sites have deteriorated since originally installed.

Your allegation that Captain Walters is a consultant for the local Community Emergency Response Team and that he was using your clients' predicament to further CERT's goals is most disturbing. Even though the fire service fully supports CERT's efforts to protect their communities, neither Captain Walters nor I have any connection with this particular group or the Sunset Beach Improvement Association. As a matter of fact, it was I who brought this route to Captain Walter's attention as a possible way for your clients to mitigate this access requirement. It was not until we spoke with State Parks following our site visit that we discovered that it was CERT in concert with Parks that had installed the redwood-chipped route. I am aware that the secondary ingress/egress was not included in your clients' coastal development permit nor is it in County ordinance. The County ordinance does, however, allow the County Fire Chief some latitude in how to meet the Code's intent and it was through this discretion that I'd hoped to help develop a reasonable solution. I'll readily admit that I'd prefer not to have such discretion – it would certainly make the approval/denial process simpler for me – but that would not best serve the community. As for the legalities and feasibility of this alternative, I only submitted it as a suggestion for you and your clients to consider. Any furtherance of the matter as an in-lieu of the work on Sunset Drive would have been at your ambition, although we may have been able to support your efforts.

In short, our efforts over the past few weeks were the result of your clients' appeal of the initial approval of the exception allowing a 12' wide road with appropriately sized turnouts in lieu of the required 18' wide access road. I am glad to see that your clients have elected to accept the standard exception. I'm happy to tell you that State Parks has informed us that the easement along Sunset Drive is 40' from the kiosk to the top of the road at the subdivision. That should diminish your clients' concerns with respect to approval from State Parks for the work required to improve the turnouts.

Sincerely

John E. Ferreira
Chief

FIRE CHIEFS ASSOCIATION OF SANTA CRUZ COUNTY

**(FIRE PREVENTION STANDARD #13
TURNOUTS)**



Fire Chiefs Association

FIRE PREVENTION OFFICERS SECTION

of Santa Cruz County

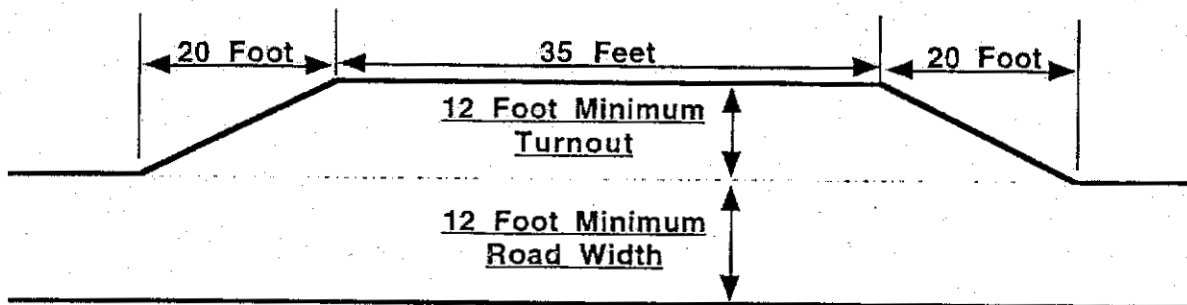
FIRE PREVENTION STANDARDS	DATE: 06/06/02	NUMBER: FP0-013
	APPROVED: M. Biddle SCO	REVISED:
	TITLE: Turnouts (Outside Urban Service Line)	

TURNOUTS

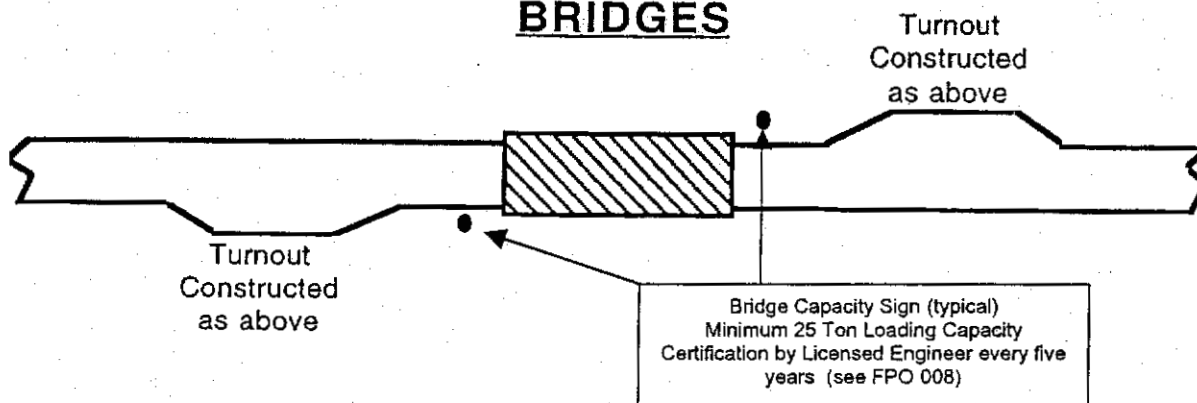
(outside of the Urban Service Line)

TURNOUTS

TYPICAL 12' ROADWAY WITH TURNOUTS EVERY 500 FEET OR LESS



BRIDGES





County of Santa Cruz

COUNTY FIRE DEPARTMENT

P.O. DRAWER F-2, 6059 HIGHWAY 9, FELTON CA 95018

(831) 335-5353 FAX: (831) 335-4053 TDD: (831) 454-2123

JOHN FERREIRA, CHIEF

April 2, 2009

Ms. Camas J. Steinmetz
Manatt/Phelps/Phillips
1001 Page Mill Road, Building 2
Palo Alto, California 94304

Dear Ms. Steinmetz:

44 Sunset Drive (Ferguson/Montalbo), Watsonville, California

I am not sure that you've read the letter I sent to you on March 19th. In that case, I'd like to reiterate the following in response to questions/comments you raise in your April 1st e-mail:

If an applicant is intent on using turnouts as an alternative to an 18' wide road to a parcel, then there can be no stretch of that road longer than 500' that does not contain adequate passing space for a fire engine and another vehicle. Your consultant, Mr. Stephen Graves, confirms that in the first 747' of travel on Sunset Drive there are two existing turnouts (travelling from the State Park's kiosk towards the south and your applicant's project).

County Code and standards clearly define the dimensions for such turnouts as 12' wide and 35' long (excluding ease-in and ease-out area). Your consultant, Mr. Christopher George, describes the lower of these turnouts as being between 6' and 10' wide and the upper turnout as being only 6' wide. Either one of those two turnouts would satisfy the County's requirements if they were made to meet the dimensional standards.

State Parks has informed us that there is a 40' wide easement along Sunset Dr. (from their kiosk to the top of Sunset Dr. where your applicant's project is part of the existing subdivision). I am not certain as to the validity of the need to acquire an encroachment permit from them.

During my term as Fire Chief here, no projects have risen to the level requiring such scrutiny of the access along Sunset Dr. Your charge that County Fire (not CAL FIRE) is being arbitrary and discriminatory in this case is unfounded.

I appreciate your diligence in this matter but your issue should not be considered as "one last attempt to change your (my) mind", but rather, my obligations as County Fire Chief to provide for public safety and apply the County's codes and standards as they relate to new construction. I recognize your right to appeal this to the newly formed Building, Accessibility, and Fire Code Appeals Board.

Sincerely

John E. Ferreira
Chief

2007 CALIFORNIA FIRE CODE

**(CHAPTER 1 – GENERAL CODE
PROVISIONS)**

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS

**CHAPTER 1
GENERAL CODE PROVISIONS**

CALIFORNIA FIRE CODE - MATRIX ADOPTION TABLE

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR
				1	2	1/AC	AC	SS	1	2	3	4			
Adopt Entire Chapter															
Adopt Entire Chapter as amended (amended sections listed below)															
Adopt only those sections that are listed below			X				X								
Chapter / Section	Codes														
101.0 - 101.12	CA		X												
109 and 109.1	CA						X								
111.0 - 111.10	CA		X												

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL

**SECTION 101
GENERAL**

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.1 Title.

101.1 Title.

These regulations shall be known as the California Fire Code, may be cited as such and will be referred to herein as "this code." The California Fire Code is Part 9 of twelve parts of the official compilation and publication of the adoption, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2006 International Fire Code of the International Code Council with necessary California amendments.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.2 Purpose.

101.2 Purpose.

The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.3 Scope.

101.3 Scope.

The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

This code establishes regulations affecting or relating to buildings, structures, processes, premises and a reasonable degree of life and property safeguards regarding:

- 1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices;*
- 2. Conditions hazardous to life, property or public welfare in the use of, occupancy of buildings, structures, or premises;*
- 3. Fire hazards in the buildings, structures, or on premises from use of, occupancy of, or operation;*
- 4. Matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems.*

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.3 Scope. / 101.3.1 Nonstate-regulated buildings, structures, and applications.

101.3.1 Nonstate-regulated buildings, structures, and applications.

Except as modified by local ordinance pursuant to Section 101.8, the building standards in the California Code of Regulations, Title 24, Parts 2, 3, 4, 5, 6, 9 and 10 shall apply to all occupancies and applications not regulated by a state agency.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.3 Scope. / 101.3.2 State-regulated buildings, structures, and applications.

101.3.2 State-regulated buildings, structures, and applications.

The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 102 through 113, except where modified by local ordinance pursuant to Section 101.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.

***Note:** See Preface to distinguish the model code provisions from the California provisions.*

1. Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 111:

- 1. Buildings or structures used or intended for use as an:
 - 1.1. Asylum, jail*
 - 1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity*
 - 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education*
 - 1.4. Small family day-care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities*
 - 1.5. State institutions or other state-owned or state-occupied buildings*
 - 1.6. High-rise structures*
 - 1.7. Motion picture production studios*
 - 1.8. Organized camps*
 - 1.9. Residential structures**
- 2. Tents, awnings or other fabric enclosures used in connection with any occupancy*
- 3. Fire alarm devices, equipment and systems in connection with any occupancy*

4. Hazardous materials, flammable and combustible liquids
5. Public school automatic fire detection, alarm, and sprinkler systems
6. Wildland urban interface fire areas

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.4 Appendices.

101.4 Appendices.

Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 101.8 of this code.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.5 Referenced codes.

101.5 Referenced codes.

The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized fire engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire-prevention engineering practices.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.6 Non-building standards, orders and regulations.

101.6 Non-building standards, orders and regulations.

Requirements contained in the California Fire Code, or in any other referenced standard, code or document, which are not building standards as defined in Section 18909, Health and Safety Code, shall not be construed as part of the provisions of this code. For non-building standards, orders, and regulations, see other titles of the California Code of Regulations.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.7 Order of precedence and use.

101.7 Order of precedence and use.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.7 Order of precedence and use. / 101.7.1 Differences.

101.7.1 Differences.

In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.7 Order of precedence and use. / 101.7.2 Specific provision.

101.7.2 Specific provision.

Where a specific provision varies from a general provision, the specific provisions shall apply.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.7 Order of precedence and use. / 101.7.3 Conflicts.

101.7.3 Conflicts.

When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirement shall prevail.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.8 City, county, or city and county amendments, additions or deletions.

101.8 City, county, or city and county amendments, additions or deletions.

The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 101.8.1. The effective date of amendments, additions, or deletions to this code of cities, counties, or city and counties filed pursuant to Section 101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.8 City, county, or city and county amendments, additions or deletions. / 101.8.1 Findings and filings.

101.8.1 Findings and filings.

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3rd Street, Room 260, Sacramento, CA 95814.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.9 Effective date of this code.

101.9 Effective date of this code.

Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.10 Availability of codes.

101.10 Availability of codes.

At least one entire copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. See Health and Safety Code Section 18942 (d) (1) & (2).

2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION 101 GENERAL / 101.11 Format.

101.11 Format.

This part fundamentally adopts the International Fire Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix adoption table of each chapter of this part. When the Matrix adoption tables make no reference to a specific chapter of the International Fire Code, such chapter of

the International Fire Code is not adopted as a portion of this code.

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
101 GENERAL / 101.12 Validity.**

101.12 Validity.

If any chapter Section, subSection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
102 RESERVED**

**SECTION 102
RESERVED**

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
103 RESERVED**

**SECTION 103
RESERVED**

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
104 RESERVED**

**SECTION 104
RESERVED**

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
105 RESERVED**

**SECTION 105
RESERVED**

**2007 California Fire Code / CHAPTER 1 GENERAL CODE PROVISIONS / SECTION
106 RESERVED**

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES

**CHAPTER 5
FIRE SERVICE FEATURES**

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2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES

**CHAPTER 5
FIRE SERVICE FEATURES**

CALIFORNIA FIRE CODE - MATRIX ADOPTION TABLE

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR
				1	2	1/AC	AC	SS	1	2	3	4			
Adopt Entire Chapter															
Adopt Entire Chapter as amended (amended sections listed below)															
Adopt only those sections that are listed below			X												
Chapter / Section	Codes														
503.5.2	CA		X												
508.3	CA		X												
508.5	CA		X												
508.5.3	CA		X												
509.1	CA		X												

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 501
GENERAL**

**SECTION 501
GENERAL**

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 501
GENERAL / 501.1 Scope.**

501.1 Scope.

Fire service features for buildings, structures and premises shall comply with this chapter.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 501
GENERAL / 501.2 Permits.**

501.2 Permits.

A permit shall be required as set forth in Appendix Chapter 1, Sections 105.6 and 105.7.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 501 GENERAL / 501.3 Construction documents.

501.3 Construction documents.

Construction documents for proposed fire apparatus access, location of fire lanes and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 501 GENERAL / 501.4 Timing of installation.

501.4 Timing of installation.

When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 502 DEFINITIONS

SECTION 502 DEFINITIONS

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 502 DEFINITIONS / 502.1 Definitions.

502.1 Definitions.

The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

FIRE APPARATUS ACCESS ROAD. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway.

FIRE COMMAND CENTER. The principal attended or unattended location where the status of the detection, alarm communications and control systems is displayed, and from which the system(s) can be manually controlled.

FIRE DEPARTMENT MASTER KEY. A limited issue key of special or controlled design to be carried by fire department officials in command which will open key boxes on specified properties.

FIRE LANE. A road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus.

KEY BOX. A secure device with a lock operable only by a fire department master key, and containing building entry keys and other keys that may be required for access in an emergency.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS**

**SECTION 503
FIRE APPARATUS ACCESS ROADS**

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.1 Where required.**

503.1 Where required.

Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.1 Where required. / 503.1.1 Buildings and facilities.**

503.1.1 Buildings and facilities.

Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exception: The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. The building is equipped throughout with an approved automatic sprinkler system

installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.

2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.1 Where required. / 503.1.2 Additional access.**

503.1.2 Additional access.

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.1 Where required. / 503.1.3 High-piled
storage.**

503.1.3 High-piled storage.

Fire department vehicle access to buildings used for high-piled combustible storage shall comply with the applicable provisions of Chapter 23.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications.**

503.2 Specifications.

Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.7.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.1 Dimensions.**

503.2.1 Dimensions.

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503

FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.2 Authority.

503.2.2 Authority.

The fire code official shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.3 Surface.**

503.2.3 Surface.

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.4 Turning radius.**

503.2.4 Turning radius.

The required turning radius of a fire apparatus access road shall be determined by the fire code official.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.5 Dead ends.**

503.2.5 Dead ends.

Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.6 Bridges and
elevated surfaces.**

503.2.6 Bridges and elevated surfaces.

Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.2 Specifications. / 503.2.7 Grade.**

503.2.7 Grade.

The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.3 Marking.**

503.3 Marking.

Where required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.4 Obstruction of fire apparatus access roads.**

503.4 Obstruction of fire apparatus access roads.

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.5 Required gates or barricades.**

503.5 Required gates or barricades.

The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.5 Required gates or barricades. / 503.5.1
Secured gates and barricades.**

503.5.1 Secured gates and barricades.

When required, gates and barricades shall be secured in an approved manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not

be trespassed on or used unless authorized by the owner and the fire code official.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.5 Required gates or barricades. / [B] 503.5.2
Fences and gates.**

[B] 503.5.2 Fences and gates.

School grounds may be fenced and gates therein may be equipped with locks, provided that safe dispersal areas based on 3 square feet (0.28 m²) per occupant are located between the school and the fence. Such required safe dispersal areas shall not be located less than 50 feet (15 240 mm) from school buildings.

Every public and private school shall conform with Section 32020 of the Education Code which states:

The governing board of every public school district, and the governing authority of every private school, which maintains any building used for the instruction or housing of school pupils on land entirely enclosed (except for building walls) by fences or walls, shall, through cooperation with the local law enforcement and fire protection agencies having jurisdiction of the area, make provision for the erection of gates in such fences or walls. The gates shall be of sufficient size to permit the entrance of the ambulances, police equipment and fire-fighting apparatus used by the law enforcement and fire protection agencies. There shall be no less than one such access gate and there shall be as many such gates as needed to ensure access to all major buildings and ground areas. If such gates are to be equipped with locks, the locking devices shall be designed to permit ready entrance by the use of the chain or bolt-cutting devices with which the local law enforcement and fire protection agencies may be equipped.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 503
FIRE APPARATUS ACCESS ROADS / 503.6 Security gates.**

503.6 Security gates.

The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 504
ACCESS TO BUILDING OPENINGS AND ROOFS**

SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS / 504.1 Required access.

504.1 Required access.

Exterior doors and openings required by this code or the *California Building Code* shall be maintained readily accessible for emergency access by the fire department. An approved access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the fire code official.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS / 504.2 Maintenance of exterior doors and openings.

504.2 Maintenance of exterior doors and openings.

Exterior doors and their function shall not be eliminated without prior approval. Exterior doors that have been rendered nonfunctional and that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words THIS DOOR BLOCKED. The sign shall consist of letters having a principal stroke of not less than 0.75 inch (19.1 mm) wide and at least 6 inches (152 mm) high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. Exit and exit access doors shall comply with Chapter 10. Access doors for high-piled combustible storage shall comply with Section 2306.6.1.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 504 ACCESS TO BUILDING OPENINGS AND ROOFS / 504.3 Stairway access to roof.

504.3 Stairway access to roof.

New buildings four or more stories in height, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3 percent slope), shall be provided with a stairway to the roof. Stairway access to the roof shall be in accordance with Section 1009.12. Such stairway shall be marked at street and floor levels with a sign indicating that the stairway continues to the roof. Where roofs are used for roof gardens or for other purposes, stairways shall be provided as required for such occupancy classification.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 505

PREMISES IDENTIFICATION

SECTION 505 PREMISES IDENTIFICATION

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 505 PREMISES IDENTIFICATION / 505.1 Address numbers.

505.1 Address numbers.

New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 505 PREMISES IDENTIFICATION / 505.2 Street or road signs.

505.2 Street or road signs.

Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 506 KEY BOXES

SECTION 506 KEY BOXES

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 506 KEY BOXES / 506.1 Where required.

506.1 Where required.

Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 506
KEY BOXES / 506.1 Where required. / 506.1.1 Locks.**

506.1.1 Locks.

An approved lock shall be installed on gates or similar barriers when required by the fire code official.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 506
KEY BOXES / 506.2 Key box maintenance.**

506.2 Key box maintenance.

The operator of the building shall immediately notify the fire code official and provide the new key when a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507
HAZARDS TO FIRE FIGHTERS**

**SECTION 507
HAZARDS TO FIRE FIGHTERS**

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507
HAZARDS TO FIRE FIGHTERS / 507.1 Trapdoors to be closed.**

507.1 Trapdoors to be closed.

Trapdoors and scuttle covers, other than those that are within a dwelling unit or automatically operated, shall be kept closed at all times except when in use.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507
HAZARDS TO FIRE FIGHTERS / 507.2 Shaftway markings.**

507.2 Shaftway markings.

Vertical shafts shall be identified as required by this section.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507
HAZARDS TO FIRE FIGHTERS / 507.2 Shaftway markings. / 507.2.1 Exterior access to
shaftways.**

507.2.1 Exterior access to shaftways.

Outside openings accessible to the fire department and which open directly on a hoistway or shaftway communicating between two or more floors in a building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible from the outside of the building.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507 HAZARDS TO FIRE FIGHTERS / 507.2 Shaftway markings. / 507.2.2 Interior access to shaftways.**507.2.2 Interior access to shaftways.**

Door or window openings to a hoistway or shaftway from the interior of the building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible.

Exception: Marking shall not be required on shaftway openings which are readily discernible as openings onto a shaftway by the construction or arrangement.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 507 HAZARDS TO FIRE FIGHTERS / 507.3 Pitfalls.**507.3 Pitfalls.**

The intentional design or alteration of buildings to disable, injure, maim or kill intruders is prohibited. No person shall install and use firearms, sharp or pointed objects, razor wire, explosives, flammable or combustible liquid containers, or dispensers containing highly toxic, toxic, irritant or other hazardous materials in a manner which may passively or actively disable, injure, maim or kill a fire fighter who forcibly enters a building for the purpose of controlling or extinguishing a fire, rescuing trapped occupants or rendering other emergency assistance.

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508 FIRE PROTECTION WATER SUPPLIES**SECTION 508
FIRE PROTECTION WATER SUPPLIES****2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508 FIRE PROTECTION WATER SUPPLIES / 508.1 Required water supply.****508.1 Required water supply.**

An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.2 Type of water supply.**

508.2 Type of water supply.

A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.2 Type of water supply. / 508.2.1 Private
fire service mains.**

508.2.1 Private fire service mains.

Private fire service mains and appurtenances shall be installed in accordance with NFPA 24.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.2 Type of water supply. / 508.2.2 Water
tanks.**

508.2.2 Water tanks.

Water tanks for private fire protection shall be installed in accordance with NFPA 22.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.3 Fire flow.**

508.3 Fire flow.

Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method *or Appendix B*.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.4 Water supply test.**

508.4 Water supply test.

The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official or approved documentation of the test shall be provided to the fire

code official prior to final approval of the water supply system.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems.**

508.5 Fire hydrant systems.

Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6 *and Appendix C or by an approved method.*

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.1 Where
required.**

508.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.2
Inspection, testing and maintenance.**

508.5.2 Inspection, testing and maintenance.

Fire hydrant systems shall be subject to periodic tests as required by the fire code official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.3 Private
fire service mains and water tanks.**

508.5.3 Private fire service mains and water tanks.

Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with *Title 19 California Code of Regulations Chapter 5.*

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.4
Obstruction.**

508.5.4 Obstruction.

Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.5 Clear
space around hydrants.**

508.5.5 Clear space around hydrants.

A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 508
FIRE PROTECTION WATER SUPPLIES / 508.5 Fire hydrant systems. / 508.5.6 Physical
protection.**

508.5.6 Physical protection.

Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall comply with Section 312.

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 509
FIRE COMMAND CENTER**

**SECTION 509
FIRE COMMAND CENTER**

2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 509

FIRE COMMAND CENTER / 509.1 Features.

509.1 Features.

Where required by other sections of this code and in all buildings classified as high-rise buildings by the *California Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building by not less than a 1-hour fire barrier constructed in accordance with Section 706 of the *California Building Code* or horizontal assembly constructed in accordance with Section 711 of the *California Building Code*, or both. The room shall be a minimum of 96 square feet (9 m²) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system unit.
2. The fire department communications system.
3. Fire-detection and alarm system annunciator system.
4. Annunciator visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-handling systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access.
13. Work table.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. *Fire command centers shall not be used for the housing of any boiler, heating unit, generator, combustible storage, or similar hazardous equipment or storage.*

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 510
FIRE DEPARTMENT ACCESS TO EQUIPMENT**

**SECTION 510
FIRE DEPARTMENT ACCESS TO EQUIPMENT**

**2007 California Fire Code / CHAPTER 5 FIRE SERVICE FEATURES / SECTION 510
FIRE DEPARTMENT ACCESS TO EQUIPMENT / 510.1 Identification.**

510.1 Identification.

Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location, shall be constructed of durable materials, permanently installed and readily visible.

**2008 SANTA
CRUZ COUNTY
CODE SECTION
7.92**

(Santa Cruz County Fire Code)

- 7.92.2210.3.4 Section 2210.3.4 is amended – Portable containers.
- 7.92.2210.5.2 Section 2210.5.2 is amended – Spills.
- 7.92.3003.5.3 Section 3003.5.3 is amended – Securing compressed gas containers, cylinders and tanks.
- 7.92.3301.1.3 Section 3301.1.3 is amended – Fireworks.
- 7.92.3301.2.4.2 Section 3301.2.4.2 is amended – Fireworks Display.
- 7.92.3308 Section 3308 is amended – Fireworks Display.
- 7.92.3804.2 Section 3804.2 is amended – Maximum Capacity.
- 7.92.5000 Chapter 50 is added – Life-Safety Requirements For Existing Buildings Other Than High-Rise.
- 7.92.5100 Chapter 51 is added – Life Safety Requirements For Existing High-Rise Buildings.
- 7.92.5200 Chapter 52, starting with Section 5201, is added – Suppression and Control of Hazardous Fire Areas.
- 7.92.5300 Chapter 53 is added – Marinas.

7.92.010

International Fire Code Adopted.

That portion of the California Building Standards Code that imposes substantially the same requirements as are contained in the International Fire Code, 2006 Edition published by the International Code Council and the California Building Standards Commission with errata, together with those portions of the International Fire Code, 2006 Edition, including Appendix Chapters B and C published by the International Code Council not included in the California Building Standards Code, as modified and amended by this chapter, are adopted by this reference into this Chapter, and are hereby collectively declared to be the Fire Code of Santa Cruz County.

7.92.101.1 Section 101.1 is amended – Title.

Section 101.1 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of Santa Cruz County, hereinafter referred to as “this code.”

7.92.102.8 Section 102.8 amended - Matters Not Provided For.

Section 102.8 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

102.8 - Matters Not Provided For. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code shall be determined by the fire code official.

The chief is authorized to render interpretations of this code and to make and enforce rules, supplemental regulations and standards in order to carry out the application and intent of its provisions. Such interpretations, rules, regulations and standards shall be in conformance with the intent and purpose of this code and shall be available to the public during normal business hours. Those standards promulgated by the Santa Cruz County Fire Chiefs Association shall be deemed as prima facie evidence of compliance with this code.

7.92.105.1 Section 105.1 amended - Scope.

Section 105.1 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

105.1 - Scope. Permits shall be in accordance with Sections 105.1.1. through 105.7.13 or other provisions of this code as required by the jurisdiction having authority.

7.92.105.1.1 Section 105.1.1 amended - Permit Required.

Section 105.1 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

105.1.1 - Permit Required. When required by the fire code official, a permit shall be obtained. Permit fees, if any, shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official.

7.92.105.2 Section 105.2 amended - Application.

Section 105.2 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

105.2 - Application. Application for a permit, when required by the fire code official, shall be made in such form and detail as prescribed by the fire code official. Applications for permits shall be accompanied by such plans as prescribed by the fire code official.

7.92.108.1 Section 108.1 amended - Board of Appeals Established.

Section 108.1 of Chapter 1 of the Fire Code of Santa Cruz County is amended to read as follows:

108.1 - Board of Appeals Established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the Building and Fire Code Appeals Board established by Chapter 2.100 of the Santa Cruz County Code. The fire code official shall be an ex-officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

7.92.311.5 Section 311.5 is amended – Placards.

Section 311.5 of Chapter 3 of the Fire Code of Santa Cruz County is amended to read as follows:

311.5 – Placards. When required by the fire code official, any building or structure determined to be unsafe pursuant to Section 110 of this code shall be marked as required by Sections 311.5 through 311.5.5.

7.92.405.2 Table 405.2 Footnote 'a' is amended - Fire and Evacuation Drill Frequency and Participation.

Footnote 'a' to Table 405.2 of Chapter 4 of the Fire Code of Santa Cruz County is amended to read as follows:

a. The frequency in all school levels shall be allowed to be modified in accordance with Section 408.3.2. Secondary level schools need only conduct evacuation drills twice each school year.

7.92.501.3 Section 501.3 is amended – Construction Documents.

Section 501.3 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

501.3 – Construction Documents. Construction documents for proposed fire apparatus access, location of fire lanes and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. When grading work is needed for the access road(s) within the jurisdiction of Santa Cruz County, application for a grading permit shall be made with the Santa Cruz County Planning Department pursuant to the Santa Cruz County Grading Ordinance. Such Permits shall be reviewed by the Santa Cruz County Environmental Coordinator as required.

7.92.502.1 Section 502.1 is amended – Definitions.

Definitions for "All Weather Surface" and "Bridge" are added to Section 502.1 of the Fire Code of Santa Cruz County to read as follows:

ALL WEATHER SURFACE. An all weather surface shall be a minimum of 6" of compacted Class II base rock for grades up to and including 5%, oil and screened for grades up to and including 15%, and asphaltic concrete for grades exceeding 15%. No Grade shall be allowed to exceed 20%.

BRIDGE. A bridge shall be defined as a structure designed to carry a roadway over a depression or obstacle.

7.92.503.2.1 Section 503.2.1 is amended – Dimensions.

Section 503.2.1 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

Section 503.2.1 – Dimensions. Fire Apparatus access roads shall have an

unobstructed width of not less than 20 feet (6096 mm) except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

EXCEPTIONS:

1. Outside of the Urban Services Line as established by the County of Santa Cruz, access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with 12-foot wide by 35-foot long turnouts located approximately every 500 feet may be provided with the approval of the fire code official.

NOTE: Title 19 of the California Administrative Code requires that access roads from every state governed building to a public street shall be all-weather hard-surface (suitable for use by fire apparatus) roadway not less than 20 feet in width. Such roadway shall be unobstructed and maintained only as access to the public street.

2. Vertical clearance may be reduced, provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved by the fire code official.

7.92.503.2.6 Section 503.2.6 is amended – Bridges and Elevated Surfaces.

Section 503.2.6 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

Section 503.2.6 - Bridges and elevated surfaces. When a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HS-20. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

7.92.503.2.6.1 Section 503.2.6.1 is added – Width. Section 503.2.6.1 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

503.2.6.1 - Width. All bridges shall be a minimum of 20 feet of clear width. The fire code official may allow the width to be reduced for access to U-1, U-2 or R-3 occupancies in accordance to the Fire Safety Element of the Santa Cruz County General Plan.

7.92.503.2.6.2 Section 503.2.6.2 is added – Certification.

Section 503.2.6.2 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

503.2.6.2 - Certification. Every private bridge hereafter constructed shall be engineered by a licensed civil or structural engineer and approved by the fire code official. Certification shall be provided by the licensed engineer in writing that the bridge complies with the design standard required by this section to the fire code official.

7.92.503.2.6.3 Section 503.2.6.3 is added – Recertification.

Section 503.2.6.3 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

503.2.6.3 - Recertification. Every private bridge shall be recertified every ten years or whenever deemed necessary by the fire code official. Such recertification shall be in accordance with the requirements of 503.2.6.2.

7.92.503.2.6.4 Section 503.2.6.4 is added – Existing Private Bridges.

Section 503.2.6.4 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

503.2.6.4 - Existing Private Bridges. An existing private bridge not conforming to these regulations may be required to conform when in the opinion of the fire code official, such repairs are necessary for public safety.

7.92.503.2.6.5 Section 503.2.6.5 is added – Fees.

Section 503.2.6.5 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

503.2.6.5 - Fees. All fees charged for the purpose of certification or recertification shall be at the owners' expense.

7.92.505.2 Section 505.2 is amended – Street and Road Signs.

Section 505.2 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

505.2 - Street and Road Signs. Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs. Posting of any road names and numbers not authorized by the Office of Street Naming and Numbering of the County of Santa Cruz, and the fire code official is prohibited.

7.92.508.1 Section 508.1 is amended – Required Water Supply.

Section 508.1 of Chapter 5 of the Fire Code of Santa Cruz County is amended to read as follows:

508.1 - Required Water Supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

The minimum water supply for all new dwellings within State Responsibility Areas (SRA) shall be capable of supplying a flow of 500 gallons per minute for 20 minutes (10,000 gallons) for each parcel. Privately owned water that is not supplied by a licensed water purveyor shall: (1) serve no more than two dwellings and no more than 10,000 square feet of habitable dwelling space, and (2) be provided pursuant to a recorded covenant that runs with the land if the water supply originates from another parcel. If a water purveyor supplies the water, the applicant must submit with the building plan written verification from the licensed purveyor that the water supply meets the flow requirement.

EXCEPTIONS:

1. A 2% reduction will be allowed for flow supplied by approved stationary water tanks, to account for the nominal standardized capacity of such tanks.
2. The Fire Chief may reduce the flow requirement to 250 gallons per minute for 20 minutes by substituting approved enhanced access, defensible space, and/or ignition-resistant material requirements.

7.92.508.5.7 Section 508.5.7 is added – Painting.

Section 508.5.7 of Chapter 5 of the Fire Code of Santa Cruz County is added to read as follows:

508.5.7 – Painting. When required by the fire code official, fire hydrants shall be painted in accordance with NFPA 291.

7.92.605.3.1.1 Section 605.3.1.1 is added – Alternate Power Sources.

Section 605.3.1.1. of Chapter 6 of the Fire Code of Santa Cruz County is added to read as follows:

Section 605.3.1.1 - Alternate Power Sources. All permanent installations of electrical generators, wind generators, solar cell, or other power sources shall be approved by the building code official. All applicable provisions of the National Electrical Code, the Uniform Plumbing Code, the California Building Code, and this Code shall be followed for any such installation. Permanent engraved and affixed signage, red in color, reading 'WARNING – This premise is provided with an Alternate Power Source. Disconnection of commercial power may not disable the electrical power source'. Lettering shall be contrasting to the background and shall be a minimum of ½" tall and shall be permanently affixed on each electrical panel subject to back-feed from alternate power sources. Any and all power disabling

**1994 SANTA CRUZ
COUNTY GENERAL
PLAN
(OBJECTIVE 6.5 FIRE HAZZARDS)**

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Objective 6.5 Fire Hazards

To protect the public from the hazards of fire through citizen awareness, mitigating the risks of fire, responsible fire protection planning and built-in systems for fire detection and suppression.

Policies

6.5.1 Access Standards

Require all new structures, including additions of more than 500 square feet, to single-family dwellings on existing parcels of record, to provide an adequate road for fire protection in conformance with the following standards:

- (a) Access roads shall be a minimum of 18 feet wide for all access roads or driveways serving more than two habitable structures, and 12 feet for an access road or driveway serving two or fewer habitable structures. Where it is environmentally inadvisable to meet these criteria (due to excessive grading, tree removal or other environmental impacts), a 12-foot wide all-weather surface access road with 12-foot wide by 35-foot long turnouts located approximately every 500 feet may be provided with the approval of the Fire Chief. Exceptions: Title 19 of the California Administrative Code, requires that access roads from every state governed building to a public street shall be all-weather hard-surface (suitable for use by fire apparatus) roadway not less than 20 feet in width. Such roadway shall be unobstructed and maintained only as access to the public street.
- (b) Obstruction of the road width, as required above, including the parking of vehicles, shall be prohibited, as required in the Uniform Fire Code.
- (c) The access road surface shall be "all weather", which means a minimum of six inches of compacted aggregate base rock, Class 2 or equivalent, certified by a licensed engineer to 95 percent compaction and shall be maintained. Where the grade of the access road exceeds 15 percent, the base rock shall be overlain by 2 inches of asphaltic concrete, Type B or equivalent, and shall be maintained.
- (d) The maximum grade of the access road shall not exceed 20 percent, with grades greater than 15 percent not permitted for distances of more than 200 feet at a time.
- (e) The access road shall have a vertical clearance of 14 feet for its entire width and length, including turnouts.
- (f) Gates shall be a minimum of 2 feet wider than the access road/driveway they serve. Overhead gate structures shall have a minimum of 15 feet vertical clearance.
- (g) An access road or driveway shall not end farther than 150 feet from any portion of a structure.
- (h) A turn-around area which meets the requirements of the fire department shall be provided for access roads and driveways in excess of 150 feet in length.
- (i) No roadway shall have an inside turning radius of less than 50 feet.

Roadways with a radius curvature of 50 to 100 feet shall require an additional 4 feet of road width. Roadways with radius curvatures of 100 to 200 feet shall require an additional 2 feet of road width.

- (j) Drainage details for the road or driveway shall conform to current engineering practices, including erosion control measures.
- (k) Bridges shall be as wide as the road being serviced, meet a minimum load bearing capacity of 25 tons, and have guard rails. Guard rails shall not reduce the required minimum road width. Width requirements may be modified only with written approval from the Fire Chief. Bridge capacity shall be posted and shall be certified every five years by a licensed engineer. For bridges served by 12 foot access roads, approved turnouts shall be provided at each bridge approach.
- (l) All private access roads, driveways, turnarounds and bridges are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.
- (m) To ensure maintenance of private access roads, driveways, turnarounds and bridges, the owner(s) of parcels where new development is proposed shall participate in an existing road maintenance group. For those without existing maintenance agreements, the formation of such an agreement shall be required.
- (n) All access road and bridge improvements required under this section shall be made prior to permit approval, or as a condition of permit approval.
- (o) Access for any new dwelling unit or other structure used for human occupancy, including a single-family dwelling on an existing parcel of record, shall be in the duly recorded form of a deeded access or an access recognized by court order.

Diagrammatic representations of access standards are available at the Santa Cruz County Planning Department and local fire agencies.

6.5.2 Exceptions to Access Road Standards

Exceptions to these standards may be granted at the discretion of the Fire Chief for single-family dwellings on existing parcels of record as follows:

- (a) When the existing access road is acceptable to the Fire Department having jurisdiction.
- (b) In addition, any of the following mitigation methods may be required:
 - (1) Participation in an existing or formation of a new road maintenance group or association.
 - (2) Completion of certain road improvements such as fill pot holes, resurface access road, provide turnouts, cut back brush, etc. are made, as determined by the fire officials, and provided that the fire department determines that adequate fire protection can still be provided.
 - (3) Provision of approved fire protection systems as determined by the Fire Chief.
- (c) The level of road improvement required shall bear a reasonable relationship to the magnitude of development proposed.

6.5.3 Conditions for Project Approval

Condition approval of all new structures and additions larger than 500 square feet, and to single-family dwellings on existing parcels of record to meet the following fire protection standards:

- (a) Address numbers shall be posted on the property so as to be clearly visible from the access road. Where visibility cannot be provided, a post or sign bearing the numbers shall be set adjacent to the driveway or access road to the property and shall have a contrasting background. Numbers shall be posted when construction begins.
- (b) Provide adequate water availability. This may be provided from an approved water system within 500 feet of a structure, or by an individual water storage facility (water tank, swimming pool, etc.) on the property itself. The fire department shall determine the adequacy and location of individual water storage to be provided. Built-in fire protection features (i.e., sprinkler systems) may allow for some exemptions of other fire protection standards when incorporated into the project.
- (c) Maintain all around structures a clearance of not less than 30 feet or to the property line (whichever is a shorter distance) of all flammable vegetation or other combustible materials; or for a greater distance as may be prescribed by the fire department.
- (d) Provide and maintain one-half inch wire mesh screens on all chimneys.
- (e) Automatic smoke detection devices shall be installed and maintained in accordance with the California Building Code and local Fire Department regulations. Sprinkler and fire alarm systems, when installed, shall meet the requirements of the local Fire Department.
- (f) Provide adequate disposal of refuse. All development outside refuse collection boundaries shall be required to include a suitable plan for the disposal of flammable refuse. Refuse disposal shall be in accordance with state, County or local plans or ordinances. Where practical, refuse disposal should be by methods other than open burning.
- (g) Require fire retardant roofs on all projects, as specified in the County Fire Code and the Uniform Fire Code. Exterior walls constructed of fire resistant materials are recommended, but are not necessarily required.

6.5.4 Fire Protection Standards for Land Divisions Outside the Urban Services Line

Require all new minor land divisions and subdivisions outside the Urban Services Line to meet the following fire protection standards:

- (a) If a proposed building site is located on a dead-end access road and is more than one-half mile from the nearest intersection with a through road, then secondary access must be provided. (See section 6.5.5, Standards for Dead-End Roads). If building site is located within a 5 minute response time from the fire department and within 500 feet of a county maintained road, then secondary access will not be required. Secondary access is defined as a 12 foot wide all-weather surface roadway with a recorded right of access and

maintenance agreement. The secondary access may be provided with a gate or other barrier on the approval of the Fire Chief. If these conditions cannot be met, development may take place only at the lowest density allowed for the area by the General Plan and LCP Land Use Plan.

- (b) All primary and secondary roads shall meet the requirements of this section and shall be maintained through a County Service Area or a joint road maintenance agreement with all property owners of record.
- (c) Location within the response time of 20 minutes from the fire station which is responsible for serving the parcel. Response time is defined as the length of time between the dispatch of ground fire vehicles from the fire station to their arrival at the location of the proposed structure(s). In areas exceeding 20 minutes response time, development may take place only at the lowest density allowed by the General Plan and LCP Land Use Plan.
- (d) Locate the building site outside any designated Critical Fire Hazard Area. If building sites cannot be located outside a Critical Fire Hazard Area, the following criteria shall be met:
 - (1) If the building site is served by a through access road or by secondary access, development may be approved only at the lowest density allowed by the General Plan and LCP Land Use Plan.
 - (2) If the parcel is on a dead-end access road and cannot develop secondary access, development may consist of only one single-family residence on the existing parcel of record; all land divisions must be denied.
- (e) The project can meet the vegetation modification requirements called for by the Fire Chief, based upon an on-site inspection, including appropriate erosion control facilities. The homeowner must maintain this vegetation modification in order to assure long-term protection. Land clearing or vegetation modification which exceeds one acre, whether planned to take place prior to or after development approval, must submit an erosion control plan for the review and approval of the County Watershed Management Section. Vegetation modification plans shall not be allowed which introduce non-native invasive plant species, and wherever possible should utilize native fire-resistant vegetation.
- (f) The project can meet the standards established by the Fire Chief for water supply and/or water storage for fire-fighting purposes.
- (g) Mitigable Critical Fire Hazard Areas. If the project lies in a Critical Fire Hazard Area and within the area bordered by the following access roads: From Day Valley Road to Freedom Blvd., to Hames Road, to Browns Valley Road to Hazel Dell Road, to Gaffey Road, down Highway 152 to Carlton Road, Carlton Road to Highway 129 and ending at Murphy Road,* and the project can meet the water storage standards, then the development may proceed at a density as determined by the Rural Density Matrix. Mitigation was based upon the following criteria:
 - (1) extent of the critical fire hazard vegetation;
 - (2) distance to adjacent fire hazard areas;
 - (3) accessibility for fire-fighting equipment;
 - (4) air moisture content;

- (5) historic record of wildland fires;
- (6) slope and terrain.

*This area has been mapped to denote areas where the fire hazard is of lesser concern, if mitigated by vegetation modification and water supply/storage supplementation. These maps are available at Santa Cruz County Planning Department, or at the California Department of Forestry and Fire Protection headquarters for review.

6.5.5 Standards for New Dead End Roads

Prohibit newly constructed dead-end roads without secondary access serving more than one parcel in new minor land divisions or subdivisions which exceed the following distances from an adequate through road unless approved by the applicable fire protection agency, the Department of Public Works, and by the Planning Commission; in no case shall a new dead-end road exceed ½ mile in length.

Urban & Suburban General Plan and LCP Land Use Plan designation	500'
Rural General Plan and LCP Land Use Plan designation	1000'
Mountain General Plan and LCP Land Use Plan designation	1500'

The standard for new subdivisions of 5 or more lots shall not exceed 500' unless recommended by the applicable fire protection agencies and the Department of Public Works, and approved by the Planning Commission.

6.5.6 Maintenance for Private Roads

Require the creation or expansion of County Service Areas (to provide road maintenance), road maintenance agreements or associations (deemed adequate to provide appropriate road maintenance) for all new private roads, and for land divisions in rural areas served by private roads.

6.5.7 Certification of Adequate Fire Protection Prior to Permit Approval

(LCP) Require all land divisions, multi-unit residential complexes, commercial and industrial complexes, public facilities and critical utilities to obtain certification from the appropriate fire protection agency that adequate fire protection is available, prior to permit approval.

6.5.8 Public Facilities Within Critical Fire Hazard Areas

(LCP) Discourage location of public facilities and critical utilities in Critical Fire Hazard Areas. When unavoidable, special precautions shall be taken to ensure the safety and uninterrupted operation of these facilities.

6.5.9 Consistency With Adopted Codes Required for New Development

(LCP) Require all new development to be consistent with the Uniform Fire Code, California Building Code, and other adopted County and local fire agency ordinance.

6.5.10 Land Divisions Access Requirements

- (LCP) (a) Require all private roads used for either primary or secondary access to be maintained through road maintenance agreements and/or associations or through a County Service Area.
- (b) Prohibit land divisions where any new building site is located more than ½ mile from a through road unless secondary access is provided.
- (c) In the North Coast and Bonny Doon planning areas, prohibit new land divisions where any new building site is located more than ½ mile from a publicly maintained road even where secondary access is provided.

6.5.11 Fire Protection Standards for Land Divisions Inside the Urban Services Line

Require all new land divisions within the Urban Services Line to be consistent with the California Fire Code, California Building Code, and other adopted County and local fire agency ordinances.

Programs

- a. Encourage fire protection agencies to enter into first alarm response and initiate contractual agreements in order to assure that the fire unit nearest the fire will respond on first alarm to a fire emergency. (Responsibility: County Fire Marshal, Board of Supervisors, local fire protection agencies)
- b. Newly constructed or approved public and private roads and streets must be identified by a name or number through a consistent countywide system, which provides for sequenced or patterned numbers and/or non-duplicating naming within the County. All signs shall be mounted and oriented in a uniform manner. This section does not require any entity to rename or renumber existing roads or streets. Nor shall a roadway providing access only to a single commercial or industrial occupancy require naming or numbering. (Responsibility: Office of Emergency Services, County Fire Marshal)
- c. Define levels of fire protection services using criteria relating to distance from fire stations, density of development and magnitude of fire risk. (Responsibility: Board of Supervisors, local fire protection agencies)
- d. Develop firebreak standards for new development to separate communities or clusters of structures from native vegetation. (Responsibility: County Fire Marshal, Board of Supervisors, State Department of Forestry, and local fire protection agencies)
- e. Develop an overall firebreak plan in Critical Fire Hazard Areas and implement the plan in conjunction with the Department of Forestry and fire protection agencies. (Responsibility: California Department of Forestry and Fire Protection, local fire protection agencies, Office of Emergency Services)

- f. Provide, to the maximum extent feasible, two emergency access routes for all communities, with at least one developed to County standards.
(Responsibility: Board of Supervisors, Planning Department, Public Works)
- g. Upgrade water distribution systems where deficient to ensure adequate peak load water supply requirements for fire protection within the service areas of recognized water purveyors. Priority shall be given to areas within the Urban Services Line. (Responsibility: Water Purveyors, County Fire Department, local fire protection agencies, County Office of Emergency Services)
- h. Give priority to areas within the Urban Services Line when planning expansion of fire protection facilities and equipment. (Responsibility: fire protection agencies, Board of Supervisors)
- i. Encourage all fire protection agencies to participate in the development and implementation of a joint communications center. (Responsibility: Board of Supervisors, Communications Director, County Fire Department, California Department of Forestry and Fire Protection, local fire protection agencies, County Office of Emergency Services)
- j. Update annually the "Fire Protection Improvement Program and Long-Range Plan for Santa Cruz County." (Responsibility: Board of Supervisors, County Fire Marshal, County Office of Emergency Services)
- k. Encourage the State Department of Forestry to provide land and air fire-fighting facilities and equipment adequate to meet estimated peak fire demands. (Responsibility: Board of Supervisors, County Fire Marshal)
- l. Encourage fire protection agencies to establish educational fire prevention programs in order to have the public recognize their responsibility in preventing fires. (Responsibility: California Department of Forestry and Fire Protection, County Fire Marshal, local fire protection agencies, County Office of Emergency Services)
- m. Review and update on a periodic basis the countywide Disaster Contingency Plan. Include the appropriate County agencies in all phases of disaster contingency planning. (Responsibility: Board of Supervisors, Office of Emergency Services)
- (LCP) n. Update the Critical Fire Hazard Map as new site-specific information becomes available which more precisely defines these areas.
(Responsibility: Planning Department, County Fire Department, California Department of Forestry and Fire Protection, local fire protection agencies)
- o. Identify high fire risk areas within the Urban Services Line and rural areas

with topography, hazardous fuels, structures, density similar to those found in the Oakland Hills fire of 1991. (Responsibility: Planning Department, County Fire Marshal, local fire protection agencies, Board of Supervisors)

- (LCP) p. In cooperation with fire protection agencies, develop coordinated action programs to reduce the hazard to existing development in critical fire hazard areas such as the following:
- (1) Assessment districts to finance road improvements and secondary access; water storage, distribution and hydrant facilities; purchase of pumper trucks and/or vegetation clearance and fire break construction.
 - (2) Fire hazard inspection and code enforcement.
 - (3) Public education programs on fire prevention.
- (Responsibility: Planning Department, County Fire Marshal, local fire protection agencies, Board of Supervisors)
- q. Amend and update the Santa Cruz County General Plan Fire Safety Element as needed, to reflect fire code amendments. (Responsibility: Board of Supervisors, County Fire Marshal, local fire protection agencies, Planning Department)