



# CHINO VALLEY INDEPENDENT FIRE DISTRICT FIRE PROTECTION STANDARD

## Alternate Materials & Methods Request

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### 1. ADMINISTRATIVE

- 1.1 **PURPOSE:** This guideline is intended to provide direction for submitting requests for use of alternative materials and methods (AM&M) in accordance with the 2006 International Fire Code, Appendix Chapter 1, and Section 104.9.
- 1.2 **SCOPE:** Requests for AM& M shall be evaluated by Chino Valley Fire District (CVFD) staff to ensure the proposed design, use, or operation satisfactorily complies with the intent of the CFC and that the method of work performed or operation is at least equivalent to that prescribed in the CFC in quality, strength, effectiveness, fire resistance, durability, and safety.

### 2. GENERAL

#### 2.1 Submittal Requirements

The applicant shall provide the following information, in writing, with those plans necessary to evaluate the project:

##### 2.1.1 Identify relevant project information:

2.1.1.1 The project name, address, contact person and phone number

2.1.1.2 The owner's name, address, and phone number

2.1.1.3 Other specific information identifying the project may be required (e.g., developments permit type, tract and lot number, etc.)

2.1.2 Identify the code section or reference the specific requirement for which the modification is requested (e.g., CFC 902.2, CVFD Standard #111—Fire Access Roads, etc.)

2.1.3 Detail the alternative fire protection measures that will comprise the AM&M proposal and how they establish equivalency to those prescribed in the code.

Refer to the sample AM&M proposal letter provided at the end of this document for guidance.

## **2.2 Engineering Evaluation**

If the Fire Chief, or designee, deems an engineering evaluation necessary, it shall be completed by a firm or individual that has been approved by the CVFD. All costs associated with the preparation of the AM&M shall be borne by the applicant.

## **2.3 Submittal Process**

2.3.1 Submit the AM&M request letter and other supporting information directly to the CVFD Fire Prevention Division.

2.3.2 AM&M requests will be evaluated by CVFD plan review staff for equivalency to adopted codes and standards. All such requests are evaluated on a case-by-case basis. Approval of the request is based upon several factors, including, but not limited to, the level of equivalency achieved (as described under “Scope” in this guideline), the effect of the AM&M on fire and emergency response, and site conditions. All evaluations will be performed in the context of the specific project being reviewed.

2.3.3 If the AM&M proposal provides an equivalent level of protection considering all related conditions pertaining to the project, the CVFD will issue a response letter granting approval. Such approval may be conditional upon implementation of additional requirements listed in the AM&M response letter that were not part of the original AM&M proposal. Approval is granted only for the specific project under review and the conditions for approval shall not be construed as applicable to any other project.

2.3.4 In the event that the AM&M proposal does not provide an equivalent level of protection, the request will be denied and a response letter will be issued to this effect. Should the applicant submit a different AM&M request for this project or choose to revise and resubmit the previously denied request, additional AM&M fees may be required. To facilitate the evaluation process, include any previously denied AM&M request.

2.3.5 Upon completion of the evaluation, the AM&M response letter will be available to be picked up at the CVFD Administration office. Should evaluation of the AM&M proposal require time and resources beyond the standard allotted for this activity, additional time and materials fees may be applied. Fees must be paid when the applicant picks up the AM&M response letter.

2.3.6 Any approved AM&M request and response letters must be bluelined on the plans prior to plan approval. Retain a copy of the AM&M proposal and response at the project site at all times. This documentation may be required for review by CVFD inspection staff.

**3. Sample Letter**

**AM&M PROPOSAL LETTER**

March 26, 2003

Deputy Fire Marshal  
Chino Valley Fire District  
Fire Prevention Division  
2005 Grand Avenue  
Chino Hills, CA 91709

SUBJECT: AM&M Proposal for the Stein Residence, Address  
Permit #:

Dear Ms.:

In accordance with the 2006 International Fire Code, Appendix Chapter 1, Section 104.9, we are requesting an alternate method of fire protection for the proposed project detailed below. This is in response to items 3, 4, and 6 on the February 14, 2003, correction letter for the residential site plan submitted under Permit #104543.

**PROJECT INFORMATION**

Project: Stein Residence  
1234 Serpentine Road  
Chino Hills, CA 91709  
Tract 16345, Lot 11

Owner: Frank Nathan Stein  
987 Castle Road  
Alpine Village, CA 92803  
805-555-2468

Applicant : Peter Venton Bournes, PE Engineer's License #  
714-555-4567

**PROPOSAL**

The proposed residence is located in the Chino Hills area. The building pad is located on the top of a graded hilltop approximately 115 feet above street access at Serpentine Road. The maximum driveway grade is 19.7% and the driveway length is approximately 200 feet. This

property is located within a Hazardous Fire Area and is subject to fuel modification requirements. The residence and detached garage will be fully sprinklered accordingly.

The existing topography of the project site precludes compliance with the CVFD's requirements for a maximum roadway grade of 12% and a minimum driveway width of 20 feet for homes located in a Hazardous Fire Area. Use of the driveway grade limit would require the proposed hilltop building pad to be lowered approximately 85 feet. Widening the road to 20 feet would require retaining walls 30 feet in height.

I would like to propose the following alternative methods and materials:

1. Construct a 15-foot wide driveway from Serpentine Road to the residence and provide a flat 20-foot by 60-foot turnout on the driveway. Both will be paved with an all-weather surface and be capable of supporting 68,000 pounds.
2. Extend the width of the fuel modification zone from 30 to 60 feet and extend the width of the irrigated zone to 150 feet.
3. Provide an approved water flow monitoring system for the sprinklers serving the structures.

## **JUSTIFICATION**

The turnout on the road will allow fire trucks to pass each other safely and facilitate evacuation of the residents by providing a clear path to and from Serpentine Road. It will also provide a location to stage emergency response vehicles in the event of a fire. Extension of the fuel modification areas past the minimum widths would impede the advance of a wildland fire and further enhance protection of the structure beyond those design elements already required by CVFD regulations. The monitoring system, not normally required for a sprinkler system of the size needed to protect these structures, will improve the response time of emergency personnel and help offset the delay caused by the steep grade of the driveway.

## **ADDITIONAL COMMENTS**

We appreciate your consideration of this proposal. Should you find that the proposed items provide an equivalent level of protection to that prescribed in the CFC, we will submit revised site and fuel modification plans. If you have any questions regarding this AM&M proposal or the Stein project in general, please do not hesitate to contact me at 714-555-4567.

Sincerely,

P. Venton Bournes

Peter Venton Bournes, PE  
Fire Protection Engineer  
PVB Fire Protection, Inc.

**4. Date of Effect**

The revisions in this standard shall apply to all projects that are approved after its effective date. All drawings and plans submitted for approval on or after the signature date of the Fire Chief shall comply with the provisions set forth within this Standard.

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Tom Maxham, Division Chief/Fire Marshal

DATE

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Paul L. Benson, Fire Chief

DATE

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Past Revisions :

History: