

# City of Redlands Fire Department

## *Community Risk Reduction Division*

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# Alternative Materials & Methods Requests Guideline

## **SCOPE**

AM&M requests shall be evaluated by Redlands Fire Department (RFD) to ensure the proposed material, method of construction, design, use, or operation satisfactorily complies with the intent of the CFC. Additionally, the alternatives that are being proposed will be evaluated to determine that they are equivalent to or exceed what is prescribed in the CFC in terms of quality, strength, effectiveness, fire resistance, durability, and/or safety.

It is important to keep in mind that an AM&M is NOT a waiver. It does not excuse a project from meeting the level of safety or performance required by the code, only to achieve it in a way that may not meet the method described in the code.

## **PURPOSE**

This guideline is intended to provide direction for submitting requests for use of an alternative material or method of construction (AM&M) in accordance with the 2019 California Fire Code (CFC), Chapter 1, Section 104.9.

## **PLAN SUBMITTAL REQUIREMENTS**

1. AM&M Request: The applicant shall complete and submit the appropriate request form with those plans and other documentation necessary to evaluate the proposed AM&M. Use the “Alternate Materials, Design & Methods Request” (AM&M) form. See Section 1.1.1. below.
  - 1.1. Section A—Applicant Information: Provide the owner’s name, contact name, and contact information for the person applying for the AM&M on behalf of the owner. If the contact for technical questions is different than the applicant, provide the contact information for that person as well.
  - 1.2. Section B—Project Information: Provide the project name and address and indicate the occupancy classification, construction type, number of stories, and total floor area of the building(s) impacted by the AM&M.

1.3. Section C—Project Requirements & Proposals: This section provides information related to the applicable code requirements and proposed alternatives.

1.3.1. Code Requirement: List the code section(s) or requirement(s) that the project does not comply with or that you are proposing an alternative to. A single code section can include multiple requirements or methods of compliance, so be specific in terms of which part of the code section is being addressed by the alternative. Briefly describe the intent of the code section or requirement as it pertains to fire and life safety, emergency response, and/or firefighting, as appropriate.

Example: “A minimum 24-foot- wide fire department access road in Wildfire Risk Areas for roadways serving 1 to 3 residences. Roadways are limited to 400 feet at this width. Grade is limited to 15%. A steep, narrow road can delay arrival of fire apparatus, and vehicles parked on the driveway in preparation for evacuation or staged for firefighting would present an obstruction to accessing the home.”

1.3.2. Code Deficiency: Indicate how the project does not comply with code and why compliance with the standard requirements is not possible, feasible, or desirable.

Example: “The existing topography precludes compliance with roadway grade, width, and length requirements. Widening the road would require retaining walls 30 feet in height in some places, and limiting the driveway to 15% would require the proposed flat hilltop building pad to be lowered or driveway extended, which would have significant impacts on grading at this and adjacent sites and further lengthen the currently proposed 500-foot-long driveway.”

1.3.3. Alternative Proposal: Describe the alternatives that are being proposed to mitigate the deficiency or code requirement. This section should include only those features or measures that are provided to offset or mitigate the deficiency. Do not include any features that are otherwise already required by the code here.

Example: “As an alternative, I propose the following:

1. A flat 20x60-foot paved, all-weather turnout at the approximate mid-point of the driveway.
2. Enhance the fire sprinkler system by providing coverage in small closets, all bathrooms, and the attic.”

1.3.4. Justification: In this section, you must **justify how the project or design approach utilizing the proposed alternative material or method is as safe or effective as if the project were built in the manner detailed in the code.** Describe how the proposed alternative offsets the standard requirement. Whenever possible, the alternative should directly offset the deficiency. For example, if project deficiencies would delay emergency

response to a building fire, the alternative should provide early notification to the fire department, slow the rate of the fire's growth, contain the spread of fire to one part of building, or otherwise mitigate the negative effects of a delayed response.

You can also provide any other relevant information related to the project or proposal in this section. For instance, if the proposed alternative further enhances the effectiveness of other features already required by code in some particular way, this information could be included as additional support.

Example: "The turnout will allow fire trucks to pass each other safely and facilitate evacuation by providing a clear path from the home. It will also provide an additional location to stage emergency vehicles. The sprinkler enhancements provide additional protection for the structure and assist in extinguishing or holding a fire in check until firefighters arrive, helping to offset delays in response due to the slope or width of the driveway."

- 1.3.5. Signature: The owner or the owner's authorized representative shall provide their signature, job title, company name, and date the form was signed at the bottom of Section C.

## 2. Submittal and Review Process

- 2.1. Plan Type: The AM&M request will be reviewed and evaluated at the same time that the corresponding plan the deficiency or omission is related to, regardless of what form the proposed alternative solution takes. For example, an alternative addressing a fire department apparatus access road deficiency should be evaluated during the fire master plan (site plan) review and not the architectural review, even if it proposes an architectural solution such as enhancing fire-resistive building construction to offset the access deficiency.

- 2.2. Submittal Format, Timing, and Location: Where the AM&M is included as part of the initial plan submittal, provide one hard copy of the form and any supporting documentation. Submit the AM&M form as part of the plan package submitted to the City or directly to RFD.

Should evaluation of the AM&M proposal require time and resources beyond the standard allotted for this activity, additional fees may also be applied to recover staff costs.

- 2.3. Evaluation: All AM&M requests are evaluated on a case-by-case basis in the context of the specific project being reviewed. Approval of the request is based upon several factors, including, but not limited to, the level of equivalency achieved, the effect of the AM&M on fire and emergency response, and site conditions.

Where the AM&M proposal affects project elements under the jurisdiction of another agency, review or concurrence from that agency may also be required. Similarly, where an AM&M is proposed to the Redlands Planning or Building

Department and the alternative is also within the scope of RFD's authority, such as sprinklers or alarms, concurrence from RFD is required.

2.3.1. Approved AM&M: If RFD determines that the AM&M proposal provides an equivalent level of protection considering all related factors pertaining to the project, RFD will complete the approval section at the bottom of the request form. Such approval may be conditional upon implementation of additional requirements that were not part of the original AM&M proposal. If additional conditions are required, RFD will either:

- a) ask that the AM&M form be updated to include the additional items; or,
- b) indicate additional conditions or requirements in the "Comments" area at the bottom of the form.

RFD will provide an original hardcopy for pick-up at the RFD Fire Prevention Counter, if requested by the applicant. 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.

2.3.2. Denied AM&M: In the event that RFD determines that the AM&M proposal does not provide an equivalent level of protection, the request will be denied and a response 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 apply. To facilitate the evaluation process, include any previously denied AM&M proposals when submitting a revised AM&M request.

2.4. Other Plans: Once the AM&M request is approved, the completed AM&M form shall be incorporated into the plan that the deficiency is related to as well as all subsequent plans submitted to RFD and the Building Department that may be impacted by the approved alternative(s). In some cases, this may require revision and resubmittal of previously approved plans. Failure to incorporate the AM&M into other plans may result in return of those plans as incomplete and/or delay plan approval or interrupt progress during construction. It is the responsibility of the owner or owner's authorized agent to provide copies of approved AM&M documentation for this purpose and to ensure that all affected parties are aware of the approved alternatives.

3. Engineering Evaluation: If the Fire Code Official deems an engineering evaluation necessary, it shall be performed and reported by a firm or individual that has been approved by the RFD. The applicant is responsible for all costs associated with the preparation of the AM&M or associated analysis.