



June 21, 2021

Chair J. Keith Gilles, Chair  
Vice Chair Darcy Wheelles  
Member Mike Jani  
Member Rich Wade  
Member Susan Husari  
Member Marc Los Huertos  
Member Katie Delbar  
Member Christopher Chase  
Board of Forestry and Fire Protection  
Post Office Box 944246  
Sacramento, CA 94244-2460

Transmittal Via E-Mail: [PublicComments@BOF.ca.gov](mailto:PublicComments@BOF.ca.gov)

**RE: “State Minimum Fire Safe Regulations, 2021” Formal Comments**

Dear Chair Gilles and Board Members:

The Rural County Representatives of California (RCRC), the California State Association of Counties (CSAC), and the Urban Counties of California (UCC) urge the Board **not** to adopt the proposed “State Minimum Fire Safe Regulations, 2021” in their current form, and instead engage with local jurisdictions interactively and cooperatively to develop a more balanced, effective, and equitable proposal. Our three organizations represent all fifty-eight California counties – i.e., the local jurisdictions with greatest experience applying the Fire Safe Regulations for over 30 years, and the greatest responsibilities under the current proposal.

Local jurisdictions have a unique role in implementing the Board’s regulations, and therefore a unique perspective in this rulemaking process. These regulations cannot succeed in achieving the Board’s wildfire safety goals without partnership and cooperation between the Board and counties. We hope and expect that the Board will give the concerns expressed by locally-elected officials and technical experts the respect and consideration they are due.

We have prepared the attached revisions recommending specific changes to the proposed draft regulations, with explanatory comments as appropriate. Given the magnitude of our concerns with the Board's current draft, these changes are substantial. We would welcome the opportunity to work with the Board and its staff to further refine the regulatory language and pursue our shared goal of improving fire safety in a fair and reasonable manner.

In addition to the red-line text, the county organizations offer the following comments on several items of substance in the most recent draft Fire Safe Regulations:

- The proposal to prohibit **any** building construction in areas where the existing roads do not meet the Board's newly-prescribed standards would create "no-build" zones throughout the large swaths of California served by dirt roads, roads less than 14-feet wide or having over 25% grade. This would have substantial impacts on housing production in affected jurisdictions, and would materially impair their ability to meet state mandates to plan for adequate housing affordable to all income levels. It would similarly have devastating effects on the establishment and expansion of small businesses, and on the regional economic development necessary for recovery from the COVID-19 pandemic. In addition to being unreasonable and inequitable public policy, such restrictions may result in regulatory takings in many instances, for which the Board, as well as local jurisdictions, will face costly litigation and financial liability.
- Compounding these flaws, the proposed regulations further provide that even modest residential lot splits or business expansion would trigger requirements to bring potentially miles of public roads and bridges fully up to current standards, at the landowner's expense. This will effectively stifle meaningful housing production and economic development even in those areas outside of the "no build" zones, and substantially exacerbate the negative impacts noted above.
- The ostensible exemptions of wildfire rebuilds and accessory dwelling units from these requirements are fatally unclear. While certain provisions of the regulations purport to exempt these buildings from the regulations (§ 1270.03), other provisions appear to override or limit those exemptions and impose substantial burdens on these homeowners. (See, e.g., § 1273.00(d), providing that "[n]otwithstanding any other provision in this Subchapter, Building construction is prohibited..." and § 1273.12(d), establishing special requirements for roads used to access buildings being reconstructed after a wildfire - which would be meaningless if such reconstruction was actually exempt from the regulations.) These exemptions are confusing at best, and at worst deceptive to the regulated public.

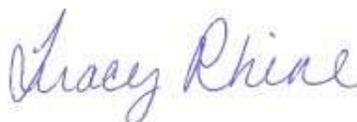
- Moreover, to the extent such exemptions work at all, they are overly narrow. The exemption for rebuilds covers *only* structures lost due to wildfire, and consequently owners whose homes or businesses were lost due to other causes (e.g., flood, mudslide, house fire, etc.) would be subject to the full panoply of requirements applicable to new construction. Also, even wildfire rebuilds are not exempt if they cannot meet the setback requirements - as is the case on many smaller lots. Rebuilding an existing home or business creates no new impact, no heightened fire risk, and no increased fire serve need. There is no nexus to require upgrades to existing public roads as a condition of rebuilding these structures.
- The proposed regulations will have significant impacts on the physical environment, by incentivizing and encouraging road improvements statewide, and substantial economic impacts on affected property owners and small businesses. The Board has a legal obligation to meaningfully evaluate and consider these impacts under the California Environmental Quality Act and the Administrative Procedures Act - but has made no serious effort to do so.

We invite Board members to carefully review these comments and concerns, and we look forward to addressing the Board directly at the forthcoming public hearing. If you have any questions, please feel free to contact Tracy Rhine (RCRC) at [trhine@rcrcet.org](mailto:trhine@rcrcet.org), Catherine Freeman (CSAC) at [cfreeman@counties.org](mailto:cfreeman@counties.org), or Jean Hurst (UCC) at [ikh@hbeadvocacy.com](mailto:ikh@hbeadvocacy.com).

Sincerely,



CATHERINE FREEMAN  
Legislative Representative  
CSAC



TRACY RHINE  
Senior Legislative Advocate  
RCRC



JEAN KINNEY HURST  
Legislative Representative  
UCC

cc: Wade Crowfoot, Secretary, Natural Resources Agency  
Hazel Miranda, Deputy Legislative Secretary, Office of the Governor  
Matt Dias, Executive Officer, Board of Forestry and Fire Protection

Attachment: "State Minimum Fire Safe Regulations, 2021" Comments

**Title 14 of the California Code of Regulations (14 CCR),**  
**Division 1.5, Chapter 7**  
**Subchapter 2, Articles 1-5**  
**“State Minimum Fire Safe Regulations, 2021”**

Subchapter 2. State Minimum Fire Safe Regulations

Article 1. Administration

§ 1270.00. Title.

These regulations shall be known as the “State Minimum Fire Safe Regulations,” and shall constitute the minimum Wildfire protection standards of the California Board of Forestry and Fire Protection.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4102, 4126, 4127 and 4290, Public Resources Code.

§ 1270.01. Definitions

The following definitions are applicable to this Subchapter.

- (a) Access: The Roads on a route from a Building to the nearest Collector Road.
- (b) Agriculture: Land used for agricultural purposes as defined in a Local Jurisdiction's zoning ordinances.
- (c) Board: California Board of Forestry and Fire Protection.
- (d) Building: Any Structure used or intended for supporting or sheltering any use or Occupancy, except those classified as Storage Group S or Utility and Miscellaneous Group U Occupancy.
- (e) CAL FIRE: California Department of Forestry and Fire Protection.

**Commented [AJW1]:** The draft regulations use "access" to define the scope of roads that must be improved as a condition of building construction. As such, it is both under and over-inclusive. As applied to individual homebuilders, small-scale residential construction, and small businesses, requiring improvement of "local" public roads from the nearest Collector imposes burdens grossly out-of-step with their impacts - as the costs to upgrade these roads (and road structures) is cost prohibitive for any but the most wealthy. Conversely, it may be undesirable to relieve truly large developments from any obligation to improve deficiencies on Collector roads that they will be heavily impacting. A "one-size-fits-all" approach here in reality fits none. All of that said, these concerns may be mitigated, and this definition made workable, through the revisions suggested later in this document.

(f) Clear Width: A horizontal area free of vegetation, debris, fences, or other materials that may impede traffic flow; this area may include flexible posts or barriers that bend upon vehicular impact and rebound to their original position, and other traffic control and safety devices in conformance with the California Manual on Uniform Traffic Control Devices.

(g) Collector Road: Roads identified by a Local Jurisdiction as a major or minor, or general, collector road pursuant to Title 23, Code of Federal Regulations, § 470.105 and in conformance with the procedures in the US Federal Highway Administration “Highway Functional Classification Concepts, Criteria, and Procedures,” 2013 Edition, hereby incorporated by reference.

(h) Dead-end Road: A Road that has only one point of vehicular ingress/egress, including cul-de-sacs and looped Roads with no other through access.

(i) Defensible Space: As defined in California Code of Regulations, Title 14, § 1299.02(a).

(j) Development: As defined in section 66418.1 of the California Government Code.

“Development” does not include facilities owned or operated by state or local public agencies, except for Residential Units.

(k) Director: Director of the Department of Forestry and Fire Protection or their designee.

(l) Driveway: A vehicular pathway that serves up to two (2) parcels with no more than two (2) Residential Units each, not including accessory or junior accessory dwelling units exempt pursuant to § 1270.03(d) (Scope – Exemptions – ADUs), and any number of non-commercial or non-industrial Storage Group S or Utility or Miscellaneous Group U Buildings on each parcel. A Driveway shall not serve commercial or industrial uses consisting of more than 7,200 square feet of structural floor area, at any size or scale.

**Commented [AJW2]:** Added for clarity, and conformity with the definition of “Road” set forth below.

**Commented [AJW3]:** This change is suggested for conformity with the general exemption of ADUs/JADUs from these regulations - and the legislative policy underlying that exclusion.

**Commented [AJW4]:** “Commercial or industrial uses” may range from small-scale activities without full-time employees to major places of public assembly, and are not all created equal. (Many small businesses do not experience the “larger commercial vehicles” and heightened “number of employee and visitor vehicles” posited in the ISOR (p. 8).) To avoid unnecessary and unreasonable burdens for truly small businesses, commercial/industrial uses below a certain threshold should be allowed to meet the driveways standards, rather than the full road standard. The proposed 7,200 sq. ft. threshold is based on the conversion metric explained in Section 1270.03, below, based on review of fire impact studies.

(m) Exception: An alternative means or method to achieve Substantial Compliance with a specified standard requested by the applicant ~~subject to~~ in accordance with § 1270.06 (Exceptions to Standards).

**Commented [AJW5]:** Reference to Substantial Compliance added for conformity with Section 1270.06 – and with the ISOR’s description of “fire safety...achieved by an alternative method *rather than the specified standard*” (p. 8).

(n) Existing Road: A physical Road constructed and used by vehicles prior to a Development proposal.

( ) Feasible: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, and technological factors.

**Commented [AJW6]:** See the explanation in the comments submitted by Santa Clara County.

(o) Fire Apparatus: A vehicle designed to be used under emergency conditions to transport personnel and equipment or to support emergency response, including but not limited to the suppression of fires.

(p) Fire Authority: A fire department, agency, division, district, or other governmental body responsible for regulating and/or enforcing minimum fire safety standards.

(q) Fire Hydrant: A valved connection on a water supply or storage system for the purpose of providing water for fire protection and suppression operations.

(r) Fuel Break: A strategically located area where the volume and arrangement of vegetation has been managed to limit fire intensity, fire severity, rate of spread, crown fire potential, and/or ember production.

(s) Greenbelts: Agricultural lands, open space, parks, wildlands, or a combination thereof, as designated by Local Jurisdictions, which surround or are adjacent to a city or urbanized area, and ~~restrict or prohibit Development~~ may function as Fuel Breaks.

(t) Greenways: Linear open spaces or corridors that link parks and neighborhoods within a community through natural or manmade trails and paths.

(u) Hammerhead/T: A Road or Driveway that provides a “T” shaped, three-point Turnaround space for Fire Apparatus, being no narrower than the Road or Driveway that serves it.

(v) Hazardous Land Use: A land use that presents a significantly elevated potential for the ignition, prolonged duration, or increased intensity of a Wildfire due to the presence of flammable materials, liquids, or gasses, or other features that initiate or sustain combustion. Such uses are determined by the Local Jurisdiction and may include, but are not limited to, power-generation and distribution facilities; wood processing or storage sites; flammable gas or liquids processing or storage sites; or shooting ranges.

~~( ) Inspection Entity: The public official or agency responsible for determining whether a proposed Building construction or Development complies with the standards in the State Minimum Fire Safe Regulations.~~

~~(w) Local Jurisdiction: Any The county, city, city/county, agency, or department, or any locally authorized district that has authority to approve Building construction within a geographic area approves or has the authority to regulate Development.~~

(x) Local Responsibility Area (LRA): Those areas of land outside a State Responsibility Area and where prevention and fire suppression is not primarily the responsibility of a federal agency pursuant to Public Resources Code (PRC) section 4125~~not classified by the Board where the financial responsibility of preventing and suppressing Wildfires is that of the state or federal government, pursuant to Public Resources Code (PRC) section 4125.~~

(y) Local Road: Roads identified by a Local Jurisdiction as a local road pursuant to Title 23, Code of Federal Regulations, § 470.105 and in conformance with the procedures in the US Federal Highway Administration “Highway Functional Classification Concepts, Criteria, and Procedures,” 2013 Edition, hereby incorporated by reference.

**Commented [AJW7]:** The definition of "Local Jurisdiction," upon whom substantial responsibilities devolve, should (1) explicitly include cities, who have such responsibilities in many LRA VHFHZ areas, and (2) should be focused on the public entity with the greatest responsibility for supervising or approving the Building construction as a whole. (Cf. CEQA Guidelines section 15051(b).) We have suggested revisions to the proposed language to achieve this and avoid overbreadth – and potential confusion and conflict amongst local agencies.

( ) Looped Road: Roads that loop back upon themselves. A road that has two or more points of connection onto a through road is not a Looped Road.

(z) Municipal-Type Water System: A system having water pipes servicing Fire Hydrants and designed to furnish, over and above domestic consumption, a minimum of 250 gpm (950 L/min) at 20 psi (138 kPa) residual pressure for a two (2) hour duration.

( ) New: Newly constructed or approved after the effective date of the regulatory action adopting this subdivision.

(aa) New Road: A theoretical Road proposed in a Development application.

(bb) Occupancy: The purpose for which a Building, or part thereof, is used or intended to be used.

(cc) One-way Road: A Road that provides a minimum of one Traffic Lane width designed for traffic flow in one direction only.

( ) Outdoor Recreation: Activities and non-residential uses compatible with the natural environment, including passive parks, campgrounds, picnic areas, ranger outposts, trails and trail heads and related parking, public restrooms, visitor centers, signage, kiosks, and information booths.

(dd) Perimeter: The boundary of an individual parcel of land and/or the boundary of a tentative and final or parcel map, pursuant to Government Code § 66411, within which lies any Building construction, or in the case of a subdivision approval, the boundary of the approved parcel map or tentative map, pursuant to Government Code § 66411.

(ee) Residential Unit: Any Building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking and/or sanitation for one or more persons. Manufactured homes, mobile homes, and factory-built housing are considered residential units, unless being

**Commented [AJW8]:** See the explanation in the comments submitted by Santa Clara County.

**Commented [AJW9]:** This definition has been re-ordered for clarity, and consistency with the intent expressed in the ISOR (p. 11).

sited or installed as an accessory or junior accessory dwelling unit in accordance with § 1270.03(d) (Scope – Exemptions – ADUs).

(ff) Ridgeline: The line of intersection of two opposing slope aspects running parallel to the long axis of the highest elevation of land.

(gg) Road: A public or private vehicular pathway to more than two (2) parcels, each of which contains any Structure, more than four (4) Residential Units, - not including accessory or junior accessory dwelling units exempt pursuant to § 1270.03(d) (Scope – Exemptions – ADUs), or to any industrial or commercial Occupancy of more than 7,200 square feet of structural floor area.

**Commented [AJW10]:** See above comment regarding commercial/industrial driveways.

(hh) Road or Driveway Structures: Bridges, culverts, and other appurtenant structures which supplement the Traffic Lane or Shoulders.

(ii) Shoulder: A vehicular pathway adjacent to the Traffic Lane.

(jj) State Responsibility Area (SRA): As defined in Public Resources Code sections 4126-4127; and the California Code of Regulations, title 14, division 1.5, chapter 7, article 1, sections 1220-1220.5.

(kk) Structure: That which is built or constructed, a Building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner for which the California Building Code requires a permit for construction.

( ) Storage Group S: A Structure used for non-hazardous storage, permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.

(ll) Substantial Compliance or Substantially Comply: Satisfaction of the purpose of the minimum standards even though the formal requirements are not satisfied. Nearly complete satisfaction of all material requirements consistent with the purpose of the applicable State Minimum Fire Safe

~~Regulations even though the formal requirements are not satisfied.~~ Where a specific code standard from the California Fire Code or National Fire Protection Association (NFPA) is referenced in this Article, any sections of the California Fire Code or NFPA standards regarding alternative methods of compliance, equivalencies, or modifications to the specified standards shall constitute substantial compliance with the applicable State Minimum Fire Safe Regulations.

(mm) Substantial Evidence: Enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, in light of the whole record of evidence, even though other conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, or evidence which is clearly erroneous or inaccurate does not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

(nn) Traffic Lane: The portion of a Road or Driveway that provides a single line of vehicle travel.

(oo) Turnaround: A portion of a Road or Driveway, unobstructed by parking, which allows for a safe opposite change of direction for Fire Apparatus. Design of such area may ~~be-include~~ a hammerhead/T or terminus bulb or as approved by the Inspection Entity or Local Jurisdiction.

(pp) Turnout: A widening in a Road or Driveway to allow vehicles to pass.

(qq) Undeveloped Ridgeline: A Ridgeline with no Buildings.

(rr) Utility and Miscellaneous Group U: A Structure of an accessory character or a miscellaneous Structure not classified in any specific Occupancy permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.

(ss) Vertical Clearance: The minimum specified height of a bridge, overhead projection, or vegetation clearance above the Road or Driveway.

**Commented [AJW11]:** The proposed definition of “substantial compliance” appears to derive from provisions of the Education Code addressing school funding audits (EC § 41344.1), and has no judicial construction or precedent in the land use arena. It’s also unclear what “nearly complete satisfaction” means in this context, which may lead to confusion and disputes.

We recommend retaining the formulation of “substantial compliance” originally proposed in the December draft of the proposed regulations. This formulation is clearer and more familiar to practitioners and the regulated public, being commonly found in legal dictionaries - and quite similar to the verbiage used in dozens of California cases. (See, e.g., Citizens for Positive Growth & Preservation v. City of Sacramento (2019) 43 Cal.App.5th 609, 620.) This formulation is also more consistent with the intent expressed in the ISOR provisions discussion Exceptions (to which this definition principally applies).

(tt) Very High Fire Hazard Severity Zone (VHFHSZ): As defined in Government Code section 51177(i).

(uu) Wildfire: As defined in Public Resources Code Section 4103 and 4104.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1270.02. Purpose.

(a) These regulations have been prepared and adopted for the purpose of establishing state minimum Wildfire protection standards in conjunction with Building construction and Development in the State Responsibility Area (SRA) and, after July 1, 2021, the Very High Fire Hazard Severity Zones, as defined in Government Code § 51177(i) (VHFHSZ). These regulations shall not apply to any Building construction or Development that occurred or received a discretionary approval or building permit from a Local Jurisdiction prior to the effective date of the applicable regulation(s).

(b) Building construction in the SRA and, after July 1, 2021, the VHFHSZ shall provide for minimum Wildfire protection in accordance with the standards as specified in the following articles.

(c) These standards shall provide for emergency ingress and egress; signing and Building numbering; private water supply reserves for emergency fire use; vegetation modification, Fuel Breaks, Greenbelts, and measures to preserve Undeveloped Ridgelines. The regulations which follow ~~shall~~ specify the minimums for such standards.

(d) By ~~conditioning/limiting~~ Building construction in existing neighborhoods and on existing roads and limiting new development approvals, in those areas where these minimum Wildfire

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protection standards are not satisfied, ~~this reduces the risk of Wildfires in these areas is reduced,~~  
~~which among other things protects the health, safety and welfare of residents, and protects~~  
~~natural resources and the environment.~~

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1270.03. Scope.

(a) ~~Except as otherwise provided in this Subchapter, F~~ these regulations shall apply to:

(1) the Perimeters and Access to all residential, commercial, and industrial Building construction ~~within the SRA~~ approved after January 1, 1991 within the SRA, and ~~those these~~ approved after July 1, 2021 within the VHFHSZ, except as set forth below in subsections (b), ~~(e)~~, ~~(d)~~, and ~~(e)~~ through (g) below.

(2) the siting of newly installed commercial modulars, manufactured homes, mobilehomes, and factory-built housing, as defined in Health and Safety Code sections 18001.8, 18007, 18008, and 19971, except where being sited or installed as an accessory or junior accessory dwelling unit as set forth in subsection (d) below;

(3) all tentative and parcel maps or other Developments within the SRA approved after January 1, 1991, and within the VHFHSZ approved after July 1, 2021; and

(4) applications for Building permits on a parcel approved in a pre-1991 parcel map (including a parcel map waiver pursuant to Government Code section 66428) or tentative map to the extent that ~~conditions matters~~ relating to the Perimeters and Access to the Buildings were not ~~approved imposed~~ as part of the ~~approval of the~~ parcel or tentative map process.

**Commented [AJW12]:** The deleted language inappropriately attempts to incorporate CEQA findings (i.e., CEQA Guidelines sections 15307 and 15308) within the regulatory text, without public notice or factual support.

The remainder of the wording of this section has been revised to more accurately reflect the purpose and effect of the regulations.

**Commented [AJW13]:** PRC 4290 provides that these regulations apply with the LRA VHFHSZ "after July 1, 2021." As originally written, this section could have been interpreted to apply these regulations to subdivision maps within the LRA VHFHSZ approved prior to that date, which would be plainly contrary to statute.

**Commented [AJW14]:** "Parcel Map Waivers" under the specified statute are effectively the equivalent of parcel maps, and appear within the scope of PRC 4290's exclusion for "parcel or tentative maps or other developments approved prior to January 1, 1991..."

**Commented [AJW15]:** These revisions reflect the fact that perimeter and access requirements for subdivisions are not always expressed as formal conditions (i.e., they are sometimes depicted visually on the map document instead). See also See 76 Ops.Cal.Atty.Gen. 19 (1993):

"The Act vests cities and counties with the power to regulate and control the 'design and improvement of subdivisions' (§ 66411) independent of the power to impose the specified conditions enumerated above...Accordingly, we believe that when a person applies for a building permit after January 1, 1991, the Board's fire safety regulations would be inapplicable as to any MATTERS APPROVED prior to January 1, 1991, as part of the parcel or tentative map process."

(b) These regulations do not apply where an application for a ~~Building permit in the SRA~~ is filed after January 1, 1991 for Development or Building construction on a parcel that was formed from a parcel map (including a parcel map waiver pursuant to Government Code section 66428) or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that ~~conditions-matters~~ relating to the Perimeters and Access to the Buildings were ~~imposed~~ approved by as part of the parcel map or ~~final~~ tentative map approved prior to January 1, 1991 process.

(1) For this exemption to apply, the parcel map or tentative map that was approved prior to January 1, 1991, shall have imposed conditions or otherwise regulated the design and improvement of the subdivision relating to the Perimeters and Access to the Building construction that is the subject of the Building permit application filed after January 1, 1991.

(2) These regulations shall apply to the Building construction to the extent that ~~conditions-matters~~ relating to the Perimeters and Access to the Buildings were not ~~imposed~~ approved as part of the ~~approval of the~~ parcel map or tentative map process.

( ) These regulations do not apply to Development of one new Structure of 1,000 square feet or less or one addition to an existing Structure totaling 1,000 square feet or less that is developed on a parcel after July 1, 2021. This exemption is limited to either one new Structure or addition to an existing Structure per parcel regardless of whether the entire 1,000 square feet is used, and only applies to parcels upon which any Building was lawfully constructed before July 1, 2021.

(c) At the discretion of the Local Jurisdiction, and subject to any requirements imposed by the Local Jurisdiction to ensure reasonable ingress, egress, and capacity for evacuation and emergency response during a Wildfire, these regulations shall not apply to the reconstruction or

**Commented [AJW16]:** The exemption set forth in PRC 4290(a) "where an application for a building permit was filed prior to January 1, 1991, or to parcel or tentative maps or other developments approved prior to January 1, 1991, if the final map for the tentative map is approved within the time prescribed by the local ordinance" is not limited to the SRA, and would thus equally apply to building permits in the LRA VHFHSZ if the statutory conditions are met.

**Commented [AJW17]:** See the explanation in the comments submitted by Santa Clara County.

repair of a Building due to a ~~disaster or other sudden and unintended casualty~~ Wildfire, subject to the following:

(1) this exemption shall not apply if the reconstruction or repair alters the footprint of the original Building, such that the Building encroaches on the minimum setback requirements in § 1276.01 Building and Parcel Siting and Setbacks, unless a reduction in the minimum setback is approved by the Inspection Entity pursuant to § 1276.01(b);

(2) this exemption shall not apply if the reconstruction or repair changes the use of the Building or Buildings that had existed previously; and

~~(3) nothing in this subsection shall be construed to alter the extent to which these regulations apply to the reconstruction or repair of a Building for reasons unrelated to a Wildfire; and~~

~~(4)~~ nothing in this subsection shall be construed to alter the legal character of a Building reconstructed or repaired pursuant to this exemption.

(d) These regulations do not apply to the creation of accessory or junior accessory dwelling units that comply with Government Code sections 65852.2 or 65852.22, or any local ordinances enacted thereunder, as applicable, including any local ordinances requiring provisions for fire and life safety.

(e) These regulations shall not apply to Greenbelts, Greenways, Roads or parcels used solely for Agriculture, mining, or the management of timberland and harvesting of forest products, or Outdoor Recreation on lands owned or leased by state or local public agencies.

~~( ) These regulations shall not apply where application of the regulations would result in a taking or damaging of private property for public use under the Constitution of the State of California or the United States.~~

**Commented [AJW18]:** This language is added for clarity, to avoid any ambiguity regarding whether the exemption determination may incorporate the flexibility built into § 1276.01.

**Commented [AJW19]:** This provision is modeled after Pub. Resources Code section 30010 (part of the Coastal Act), and is intended to ensure that these regulations do not result in regulatory takings – and consequently liability for local governments and the Board.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1270.04. Local Regulations.

(a) These regulations shall serve as the minimum Wildfire protection standards applied in SRA and VHFHSZ. ~~However, t~~These regulations do not supersede local regulations which equal or exceed the standards of this Subchapter.

(b) ~~A local regulation~~ equals or exceeds a minimum standard of this Subchapter only if, at a minimum, the local regulation ~~s, as a whole, also fully complies~~ Substantially Comply with the corresponding minimum standards in this Subchapter.

(c) A Local Jurisdiction shall not apply exemptions that are not enumerated in this Subchapter. Exceptions requested and approved in conformance with § 1270.06 (Exceptions to Standards) may be granted on a case-by-case basis.

(d) A Local Jurisdiction or Fire Authority may notify the Board upon its commencement of any revisions to relevant local regulations. The Board may provide technical assistance to the requesting agency during the revision drafting process.

(e) The Local Jurisdiction or Fire Authority may submit their draft regulation to the Board at least 90 days before ~~the first meeting of adoption of the regulation by~~ the Local Jurisdiction or Fire Authority ~~at which the proposed draft will be presented to the public.~~

(f) The Board may provide recommendations on the draft within 60 days.

(g) ~~Notwithstanding a local regulation that equals or exceeds the State Minimum Fire Safe Regulations, The Local Jurisdiction or Fire Authority shall require~~ Building construction ~~shall to~~

**Commented [AJW20]:** The provisions of this section have been revised to allow for a holistic evaluation of whether local ordinances "equal or exceed" Fire Safe Regulations. Local ordinances may be structured differently than these regulations, but nonetheless, as a whole, establish requirements that are equally or more stringent in every particular. Requiring a siloed "one-for-one" comparison of each individual regulation and ordinance provision is unnecessarily constraining, and does not serve the purposes of this section.

**Commented [AJW21]:** This is intended to clarify that this technical assistance process may only be invoked by the agency responsible for promulgating and adopting the local regulations.

**Commented [AJW22]:** The statement "notwithstanding a local regulation..." is unclear, as by definition, compliance with a local regulation that equals or exceeds the State Regulations will satisfy the underlying Regulations themselves. (In other words, there is nothing to be "notwithstanding.")

comply with the State Minimum Fire Safe Regulations in accordance with the provisions of this Subchapter.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1270.05. Inspections.

Inspections shall conform to the following requirements:

(a) Inspections in the SRA shall be made by:

(1) the Director, or

(2) Local Jurisdictions that have assumed state fire protection responsibility on SRA lands, or

(3) Local Jurisdictions where the inspection duties have been formally delegated by the Director to the Local Jurisdiction, pursuant to subsection (b).

(b) The Director may delegate inspection authority to a Local Jurisdiction subject to all of the following criteria:

(1) The Local Jurisdiction represents that they have appropriate resources to perform the delegated inspection authority.

(2) The Local Jurisdiction acknowledges that CAL FIRE's authority under subsection (d) shall not be waived or restricted.

(3) The Local Jurisdiction consents to the delegation of inspection authority.

(4) The Director may revoke the delegation at any time after consultation with the Local Jurisdiction.

(5) The delegation of inspection authority, and any subsequent revocation of the delegation, shall be documented in writing, and retained on file at the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.

(c) Inspections in the VHFHSZ shall be made by the Local Jurisdiction or Fire Authority.

(d) Nothing in this section abrogates CAL FIRE's authority to inspect and enforce state forest and fire laws in the SRA even when the inspection duties have been delegated pursuant to this section.

(e) Reports of violations within the SRA shall be provided by the Inspection Entity to the CAL FIRE Unit headquarters that administers SRA fire protection in the Local Jurisdiction.

(f) Inspections conducted by the Director shall be limited to confirming compliance with the State Minimum Fire Safe Regulations. Inspections conducted by the Local Jurisdiction or Fire Authority shall confirm compliance with the State Minimum Fire Safe Regulations in addition to any other matters prescribed by the Local Jurisdiction or Fire Authority. ~~A Local Jurisdiction may, in its discretion, conduct additional inspections with respect to a local regulation that equals or exceeds the State Minimum Fire Safe Regulations.~~

(g) The Local Jurisdiction shall ensure require that any applicable Building construction complies with the applicable sections of this Subchapter.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4102, 4119, 4125, 4290 and 4291, Public Resources Code.

§ 1270.06. Exceptions to Standards.

(a) The requirements in this section apply to requests for Exceptions from the standards in the State Minimum Fire Safe Regulations. Requests for exceptions, variances, or other

**Commented [AJW23]:** The deleted text is superfluous, in light of Local Jurisdictions' existing authority to adopt and enforce additional local regulations.

**Commented [AJW24]:** Absolutely "ensuring" compliance may be beyond the power of even the most diligent local government. "Requiring" compliance is more appropriate, and consistent with the prior language of this section.

administrative relief from a local regulation that equals or exceeds the State Minimum Fire Safe Regulations shall be processed in accordance with procedures established by the Local Jurisdiction.

(b) Upon request by the applicant, an Exception to a-one or more standards within this Subchapter may be granted by the ~~i~~Inspection ~~e~~Entity in accordance with § 1270.05 (Inspections).

(1) Exceptions shall only be granted under one the following circumstances:

(i) ~~w~~Where the Exception provides for Substantial Compliance with the minimum standards provided in this Subchapter;

(ii) To the limited extent that application of a particular standard or standards in this Subchapter are not Feasible; or

(iii) To the extent necessary to avoid a taking or damaging of private property for public use under the Constitution of the United States or the State of California.

(2) Exceptions granted by the ~~i~~Inspection ~~e~~Entity shall be made on a case-by-case basis only, shall be in writing, and shall be supported by Substantial Evidence. Exceptions granted by the ~~i~~Inspection ~~e~~Entity shall be forwarded to the Board and the appropriate CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or the county in which the Local Jurisdiction is located. Exceptions shall be retained on file at both offices for a period of no less than five (5) years.

(c) Requests for an Exception shall be made in writing to the ~~i~~Inspection ~~e~~Entity by the applicant or the applicant's authorized representative.

(1) Exception requests shall state:

(i) the specific section(s) for which an Exception is requested;

(ii) material facts supporting the necessity for an Exception;

**Commented [AJW25]:** Earlier draft regulations included requests for relief from local ordinances that “meet or exceed” the State Regulations within the Exception process. Those provisions have now been removed, and it is consequently necessary to specify how such requests will be processed. This clarity will benefit both the regulated public and Local Jurisdictions.

(iii) material facts demonstrating the proposed alternative mean(s) Substantially Complies with the State Minimum Fire Safe Regulation for which the Exception is requested, or that compliance with the particular regulation(s) for which the Exception is requested is not Feasible or will result in taking or damaging of private property for public use; and

(iv) a map showing the proposed location and siting of the Exception, including address or parcel number, as applicable; and-

(v) Any additional measures that will be incorporated into the development or Building construction to enhance fire safety or reduce fire risk.

(2) Local Jurisdictions acting as ~~h~~Inspection ~~e~~Entities pursuant to § 1270.05 (Inspections) may establish additional procedures or requirements for Exception requests.

(d) Exception decisions may be appealed. The Local Jurisdiction may establish a special appeal process for Exception requests or may utilize ~~or utilize an appeal process consistent with~~ existing local Building or planning department appeal processes.

(1) In addition to local requirements, the Local Jurisdiction shall consult with the ~~h~~Inspection ~~e~~Entity prior to making a determination on an appeal.

~~(2) The hInspection eEntity shall timely provide documentation demonstrating how the explaining its conclusion that the requested Exception does or does not substantially meet the criteria for an Exception set forth in paragraph (b)(1) comply with the standards in this Subchapter.~~

(e) If an appeal is granted, the Local Jurisdiction shall make written findings ~~of the Exception's Substantial Compliance, as defined § 1270.01 (Definitions), with the minimum standards in this Subchapter, that one or more of the criteria for an Exception set forth in paragraph (b)(1) are~~

**Commented [AJW26]:** The regulation should require that these materials be timely provided - and avoid any implication that the appeals body cannot proceed if such materials are not provided within a reasonable period of time.

The remaining changes in this subdivision are recommended for clarity.

met, supported by Substantial Evidence. Such findings shall include a written statement of reasons for overriding the decision of the inspection entity, if necessary. A written copy of these findings shall be provided to the Board and the CAL FIRE unit headquarters that administers SRA fire protection in that Local Jurisdiction, or in the county in which the Local Jurisdiction is located.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1270.07. Distance Measurements.

All specified or referenced distances are measured along the ground, unless otherwise stated.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

Article 2. Ingress and Egress

§ 1273.00. Purpose and Application.

(a) New Roads, new Driveways, and new Road or Driveway Structures, whether public or private, unless exempted under § 1270.03(b)-(eg) (Scope - Exemptions), shall provide for concurrent Fire Apparatus ingress and civilian evacuation, and shall provide unobstructed traffic circulation during a Wildfire emergency as set forth in this Article.

(b) The provisions of this Article and Article 3 (Signing and Building Numbering) shall apply to all New Roads, new Driveways, or new Road or Driveway Structures. The provisions of this Article and Article 3 (Signing and Building Numbering) shall further apply to all Existing Roads, Driveways, or Road or Driveway Structures within a-the Perimeter.

(c) The provisions of this Article and Article 3 (Signing and Building Numbering) shall further apply to any Existing Road, Driveway, or Road or Driveway Structure that provides Access to Building construction which includes

(1) the permitting or approval of ~~three-fifteen (315)~~ or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or

~~(2) construction that increases the size of commercial or industrial uses by 27,000 square feet or more; or~~

~~(23) an application for a change of zoning which proposes to increase the zoning intensity or density permitted on the parcel or parcels within the Perimeter by 20% or more above the allowable zoning intensity or density applicable on July 1, 2021; or~~

~~(34) an application for a issuance or amendment of a change in use permit which proposes to increase the use intensity or density permitted on the parcel or parcels subject to the use permit by 20% or more above the intensity or density permitted on July 1, 2021.~~

~~(d) Notwithstanding any other provision in this Subchapter, Building construction described in subdivision (c) is prohibited where Access is provided by a Road that does not meet the minimum requirements in § 1273.12 (Standards for Existing Roads).~~

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.01. Horizontal and Vertical Curves / Curb Radii.

(a) No New Road or Road Structure shall have a horizontal inside radius of curvature (measured from the centerline of the inside lane) of less than fifty (50) feet, except as provided for in subsections (b), (c), and (d).

**Commented [AJW27]:** The draft proposes to require that local public roads be upgraded to the full current standard for very small subdivisions (including some parcel maps). This lacks nexus and proportionality to the impacts of such small lot splits.

We suggest 15 residential units as a more appropriate trigger for this level of required improvements. This is a well-established "medium-size project" threshold - specifically for fire protection and water system requirements. See, e.g., Cal. Code Regs., tit. 25, §§ 1300, 2300 (fire protection equipment requirements for mobilehome and special occupancy parks); HSC 116275 (public water system regulations).

**Commented [AJW28]:** We suggest that the regulations should explicitly address large-scale commercial and industrial construction, even if consistent with the existing zoning and site permitting.

The conversion rate of 1 residential unit equals 1,800 square feet of commercial or industrial space was developed based on a review of local fire impact fee studies (which evaluate the respective fire service needs and impacts of various types and sizes of development).

**Commented [AJW29]:** Not all zoning and use permit changes are created equal, and the regulations should recognize the distinction between minor changes in the operation of existing land uses and significant expansions - particularly in light of the magnitude of the required improvements. The proposed 20% threshold provides appropriate flexibility for existing small businesses, while capturing significant expansions for which substantial road improvements may be appropriate and proportional.

**Commented [AJW30]:** As detailed in our cover letter, the proposed prohibition of any "building construction" on many of the roads in rural California is extraordinarily detrimental to housing production and economic development, among other things, and will cause regulatory takings for which the Board is financially responsible in many cases. This provision should be limited to large-scale development - which Board staff has sometimes represented to be their intention.

(1) An additional four (4) feet of surface width shall be added to the required widths in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width) to curves of 50-100 feet radius.

(2) One (1) foot of additional Road-surface width shall be added to curves of 100-200 feet, as illustrated on Figure 1 and Figure 2.

(3) Flexible posts may be placed within the required radius.

(b) Where the operating speed of a New Road is 15 miles per hour (mph) or less, an alternative standard to subsection (a) based on modeling performed by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), that demonstrates Fire Apparatus can negotiate the proposed horizontal inside radius satisfies the requirement of this section.

(c) At intersections where on-street parking and bike lanes may be present or where width allows, smaller curb radii or curb extensions to minimize pedestrian exposure and collision severity are present, the effective turning radius shall not be less than fifty (50) feet as illustrated in Figure 3 below.

(d) At intersections in areas without on-street parking and/or bike lanes where speeds approaching the intersection are less than 15 mph; and traffic volumes on the receiving road are less than 120 vehicles per hour during either an evacuation event or during the peak commute hour, whichever is a higher volume, curb radii of twenty (20) feet based on modeling performed by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), that demonstrates Fire Apparatus can negotiate the proposed horizontal inside radius as illustrated in Figure 4, satisfies the requirement of this section.

(e) The length of vertical curves of New Roads, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.

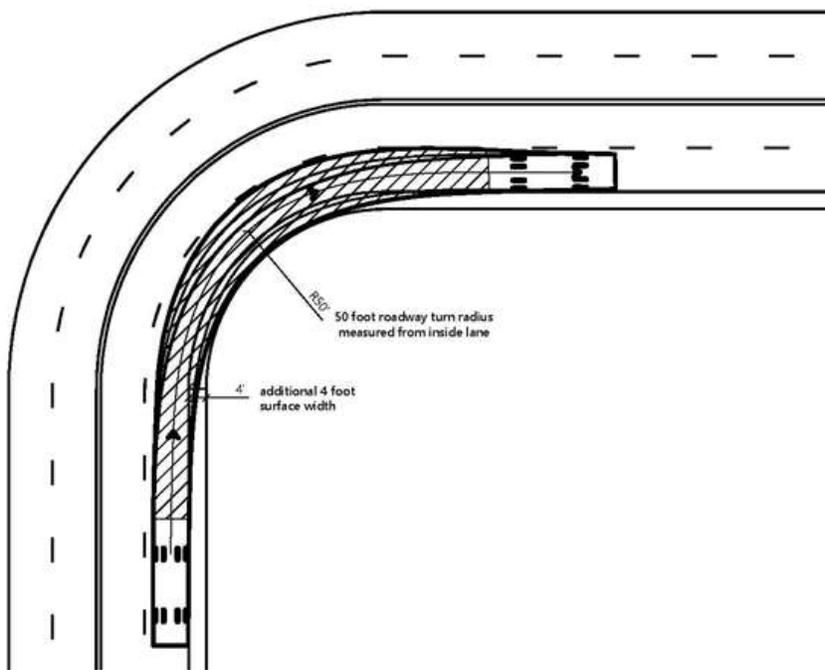


Figure 1

Effective Turning Radius for Horizontal Curvature with 50 Foot Radius

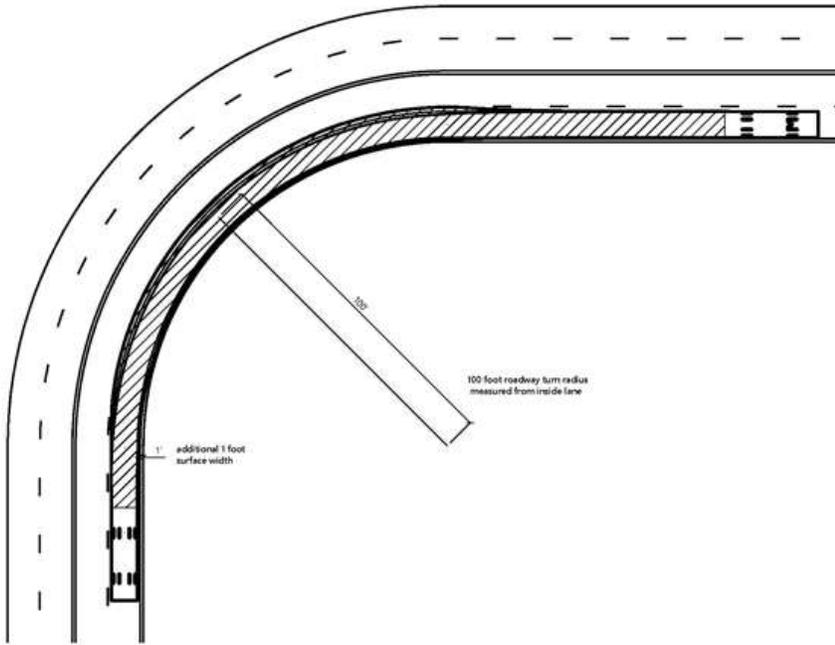


Figure 2

Effective Turning Radius for Horizontal Curvature with 100 Foot Radius

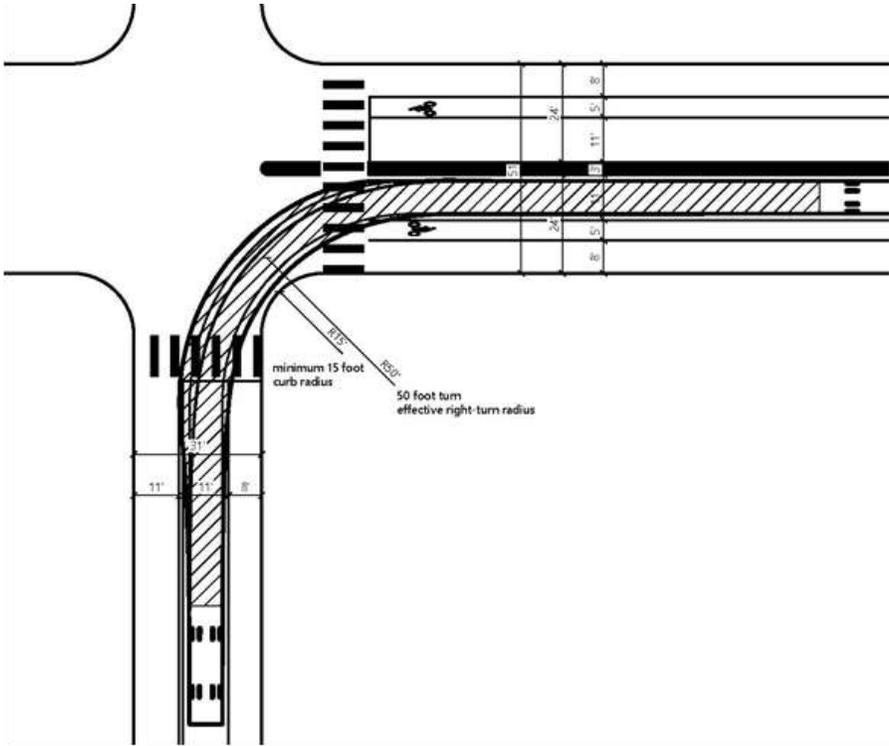


Figure 3  
 Effective Turning Radius for Intersections with Bike Lanes or Parking

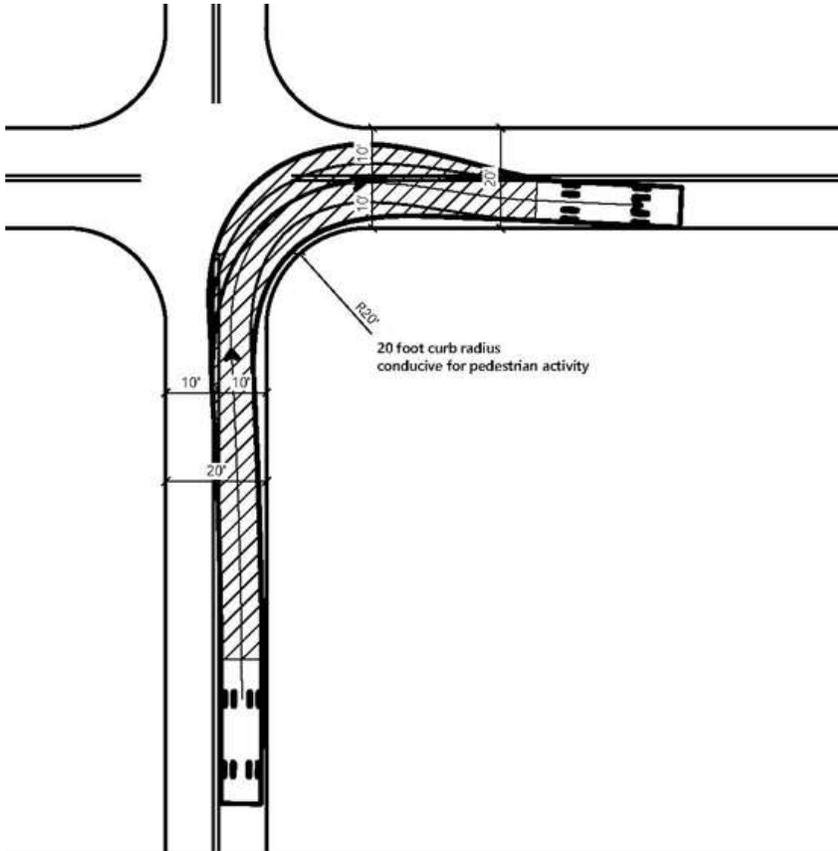


Figure 4

Effective Turning Radius for 20 Foot Wide Road Intersection

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.02. New Road and Driveway Surfaces.

(a) New Roads shall support the imposed load of Fire Apparatus weighing at least 75,000 pounds. The surface material of the Road shall be non-erodible (including, but not limited to, a binding agent, gravel, lime slurry, or pavement) and designed to support the required weight at all times, including during saturated soil conditions.

(b) Driveways and road and driveway structures shall support at least 36,000 pounds.

(c) The project proponent shall provide certified engineered specifications to support the Road design, if requested by the Local Jurisdiction.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.03. New Bridge or Elevated Structures on Roads and Driveways.

(a) Signing in conformance with the requirements in Article 3 (Signing and Building Numbering), shall reflect the capability of each bridge or elevated structure, including but not limited to weight or vertical clearance limitations, one-way road or single Traffic Lane conditions, or bridge weight rating limits.

(b) New Bridges and elevated structures shall be designed and constructed to accommodate a gross vehicle weight rating of 75,000 pounds. Vehicle load limits shall be posted at both entrances to bridges.

(1) New Bridges or elevated structures may support a maximum weight of less than 75,000 pounds if the Fire Authority or Local Jurisdiction, as applicable, verifies that the Fire Apparatus most likely to be used will be under the maximum load weight of the bridge.

(2) If the bridge or elevated structure is designed for a lower weight, then it shall be identified through signing as required in Article 3 (Signing and Building Numbering). In no case

shall ~~the-a new~~ bridge or elevated structure be designed to support a weight below 36,000 pounds.

(3) American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference, may be used in lieu of total vehicle weight if bridges and elevated structures are designed and certified by a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code).

(c) Where elevated surfaces designed for Fire Apparatus use are adjacent to surfaces which are not designed for such use, barriers, signs, and/or other distinguishing features, as approved by the Local Jurisdiction, shall be installed and maintained.

(d) Notwithstanding the above requirements, a bridge or elevated structure with only one Traffic Lane satisfies the requirements of this section so long as it provides for unobstructed visibility from one end to the other and Turnouts at both ends. Bridges or elevated structures with only one Traffic Lane shall be implemented consistent with requirements outlined in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width).

(e) New Bridges and elevated structures shall be constructed of non-combustible materials unless otherwise approved by the Local Jurisdiction.

(f) Vehicle load limits shall be posted at both entrances to any existing Bridges that cannot accommodate a gross vehicle weight rating of 75,000 pounds.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.04. New Road and Driveway Grades.

(a) The grades for all new Roads and Driveways shall not exceed sixteen (16) percent.

**Commented [AJW31]:** This requirement generally appears reasonable for new bridges, but may be highly problematic as applied to existing bridges (i.e., in connection with developments above the threshold set forth in Section 1276.03(c)). There are a number of existing bridges in California constructed with wooden elements, many of which are historic structures that would be difficult (or impossible) for even the most well-resourced developer to replace. (Additional information on this subject may be found in CalTrans extensive inventories of California's bridge stock: <https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels#surveys>) Blanket preclusion of development in areas accessed by these bridges, without consideration of their vulnerability, condition, etc. is unnecessary and inappropriate. We recommend granting the Local Jurisdiction the authority to permit such development where conditions warrant.

(b) Notwithstanding subsection (a), Road or Driveway grades of 16 to ~~20-25~~ percent satisfy the requirements of this section if the Road or Driveway has been treated to prevent slippage (including, but not limited to, aggregate treatments, binding agents, and/or paving) and scraping.

(c) Grade transitions shall be constructed and designed to accommodate maximum approach and departure angles of twelve (12) degrees.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.05. New Road and Driveway Traffic Lane Width and Clear Width.

(a) All new bidirectional Roads shall provide a minimum of two ten (10) foot Traffic Lanes, not including Shoulders ~~or striping~~. Where topographic or other limitations require the two Traffic Lanes to be constructed non-adjacently, each Traffic Lane shall provide a minimum of twelve (12) feet.

(b) All new One-way Roads shall provide a minimum of one twelve (12) foot Traffic Lane.

(c) New One-way Roads shall maintain a Clear Width of 20 feet. Bidirectional Roads with a center median shall maintain a Clear Width of 20 feet on either side of the median. This Clear Width may include bike lanes, Shoulders, or flexible barriers used as traffic calming devices or to delineate a bicycle facility, or for other uses.

(d) All Driveways shall be constructed to provide a minimum of one (1) ten (10) foot Traffic Lane ~~and~~ fourteen (14) feet Clear ~~Width, and unobstructed Vertical Clearance of thirteen feet, six inches (13' 6").~~

(e) The Clear Width requirements in this section shall not apply to portions of Roads in environmentally sensitive areas (e.g., creeks, streams, oak woodlands, sensitive and protected

**Commented [AJW32]:** Vertical clearance handled in next section, so not needed here.

**Commented [AJW33]:** See the explanation in the comments submitted by Santa Clara County.

species habitat areas) or where compliance would require the removal or severe pruning of native trees that have a circumference of 37.7 inches or more (12 inches or more in diameter) measured at 4.5 feet above the ground or immediately below the lowest branch, whichever is lower, or in the case of multi-trunk trees a trunk size of 75.4 inches in circumference or more (24 inches or more in diameter) or where compliance with the requirements is not Feasible.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.06 New Road and Driveway Vertical Clearances

(a) New Roads and Driveways shall provide for a minimum of thirteen feet and six inches (13' 6") of unobstructed Vertical Clearance.

(b) The Vertical Clearance requirements in this section shall not apply to portions of Roads in environmentally sensitive areas (e.g., creeks, streams, oak woodlands, sensitive and protected species habitat areas) or where compliance would require the removal or severe pruning of native trees that have a circumference of 37.7 inches or more (12 inches or more in diameter) measured at 4.5 feet above the ground or immediately below the lowest branch, whichever is lower, or in the case of multi-trunk trees a trunk size of 75.4 inches in circumference or more (24 inches or more in diameter) or where compliance with the requirements is not Feasible.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.07 Maximum Lengths of New One-Way Roads

(a) In no case shall a New One-Way Road exceed 2,640 feet in length.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.08 Maximum Lengths of New Dead-end Roads

(a) The maximum length of a New Dead-end Road or group of New Dead-end Roads shall not exceed the following cumulative lengths:

(1) for Roads with parcels zoned for minimum lot sizes of ~~not to exceed~~ one (1) acre or less - 800 feet;

(2) for Roads with parcels zoned for minimum lot sizes between 1.01 and up to 4.99 acres - 1,320 feet;

(3) for Roads with parcels zoned for minimum lot sizes of 5 acres or larger - 2,640 feet.

(b) All New Dead-end Roads shall meet the Turnaround requirements in § 1273.10 (Road and Driveway Turnarounds).

(c) All New Dead-end Roads shall meet the width requirements in § 1273.05 (Road and Driveway Traffic Lane Width and Clear Width).

(d) Each New Dead-end Road or group of New Dead-end Roads shall be connected directly to a through Road (a Road that is connected to other Roads at both ends) or to a Collector Road, except where the New Dead-End Road or group of New Dead-end Roads reduces travel time to exit an area for which Access is provided only by Dead-End Roads.

(e) The length of New Dead-end Roads or group of New Dead-end Roads shall be measured from the center line of the through Road or Collector Road it connects to, to the terminus of the Dead-end Road at its farthest point.

**Commented [AJW34]:** Dead-end roads sometimes connect to other dead-end roads – which appears permissible, so long as the aggregate length of all such roads does not exceed the prescribed length. This change is intended to clarify that.

(f) Where a New Dead-end Road provides access to differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.09 New Road and Driveway Turnouts

(a) Turnouts on New One-way Roads and New Dead-End Roads shall be a minimum of twelve (12) feet wide from the shoulder stripe, twenty-two (22) feet long with a minimum twenty-five (25) foot taper on each end and be facilitated outside of the Traffic Lane to accommodate one passenger vehicle as illustrated on Figure 5.

(b) On New One-way Roads and New Dead-end Roads over 400 feet in length, a Turnout shall be located at approximately the midpoint of the Road, in addition to any other Turnouts Required.

(c) Turnouts shall be provided no more than 400 feet apart on One-way Roads or on Roads that do not meet the width requirements.

(d) New Driveways that are less than 20 feet wide and exceed 150 feet in length shall require a Turnout.

(e) New Driveways greater than 150 feet in length and less than 800 feet in length shall provide a Turnout near the midpoint of the Driveway.

(f) Where the new Driveway exceeds 800 feet, Turnouts shall be provided no more than 400 feet apart.

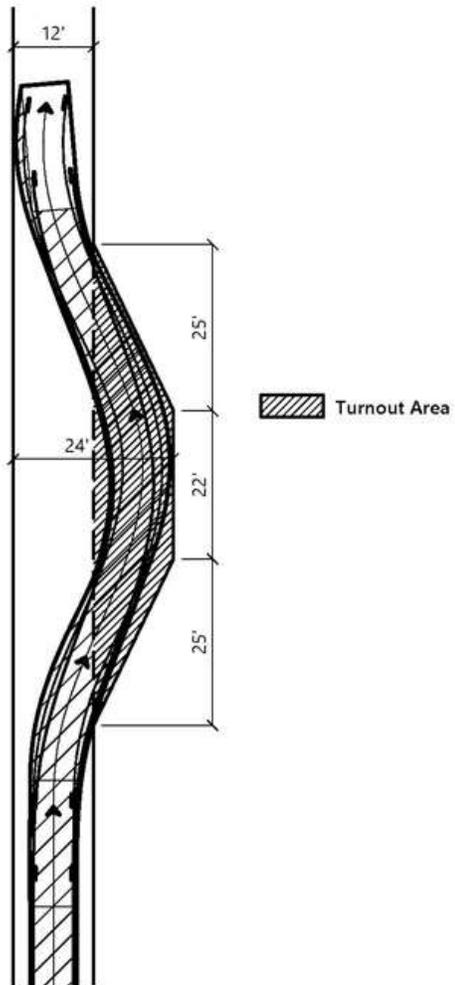


Figure 5

Turnout Dimensions

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.10 Road and Driveway Turnarounds

- (a) Each New Dead-end Road shall have a Turnaround constructed at its terminus. Where a New Dead-end Road ~~exceeds 1,320 feet~~~~crosses parcels zoned for five (5) acres or larger~~, a Turnaround shall also be provided halfway along the Dead-end Road.
- (b) A Turnaround shall be provided on New Driveways over 300 feet in length and shall be within fifty (50) feet of the Building.
- (c) A Turnaround shall meet one of the following requirements in accordance with Figures 6.1, 6.2, or 6.3.
- (d) Turnarounds with a radius smaller than 40 feet, shown in Figures 6.2 and 6.3 below, may be approved by the Local Jurisdiction when physical constraints prohibit the ability to install a 40-foot Turnaround.
- (e) The center of the Turnaround shall remain clear of vegetation or decorative elements.
- (f) If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.

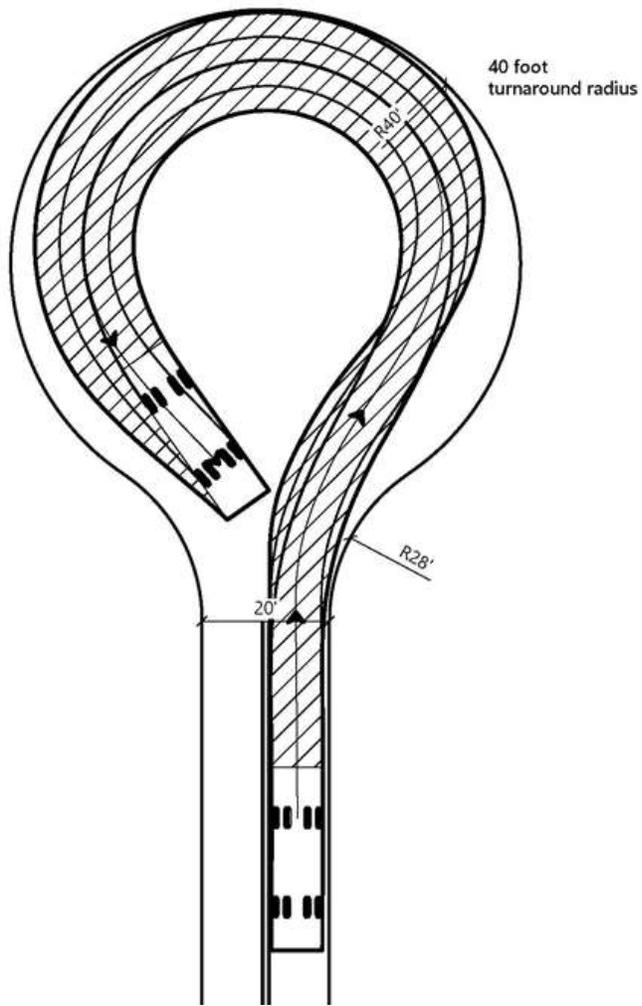


Figure 6.1

Turnarounds with 40-foot radius

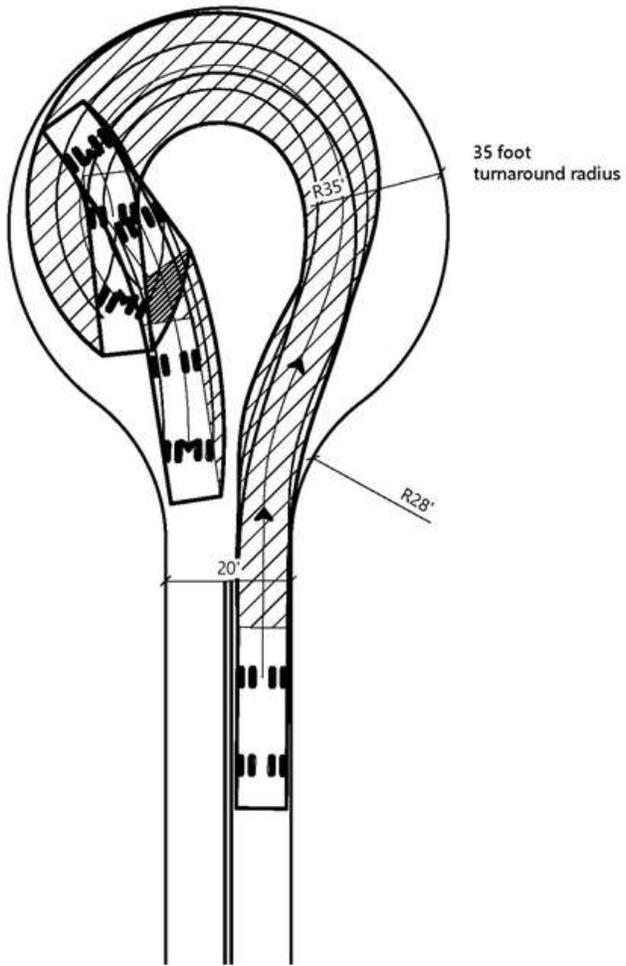


Figure 6.2

Turnarounds with 35-foot radius

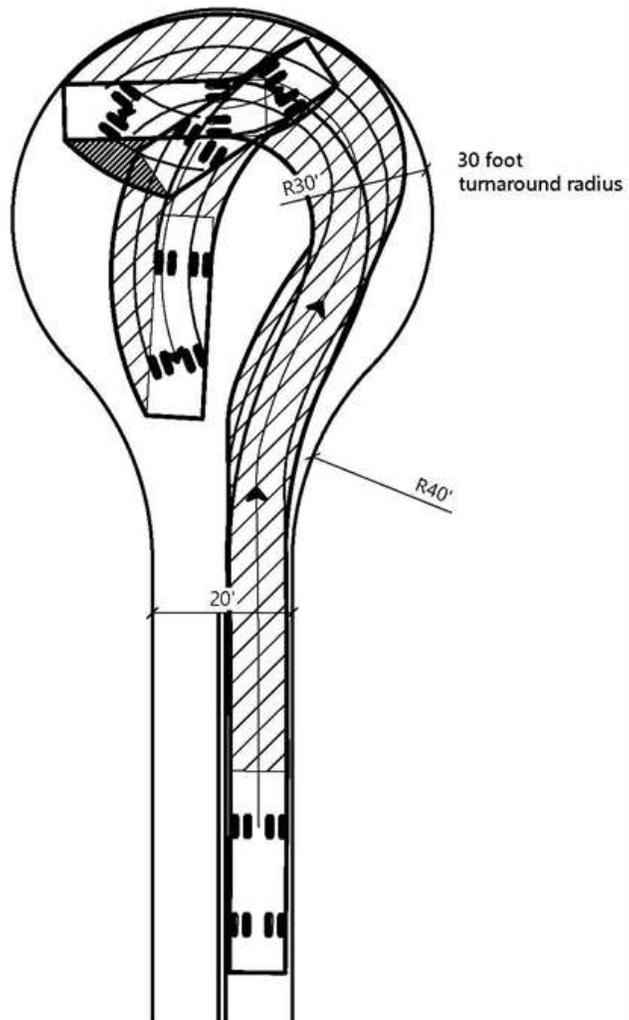


Figure 6.3

Turnarounds with 30-foot radius

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.11 Gates

(a) Gates shall have an approved means of emergency operation. Electronic gates shall have a manual method of opening in case of electronic failure. The manual method shall be maintained operational at all times.

(b) Gate entrances shall be at least two (2) feet wider than the width of the Road or Driveway, as shown in Figure 7 below. Where a gate is installed across an existing Road or Driveway, the gate shall be no less than ten (10) feet wide, ~~with a minimum Clear Width of fourteen (14) feet and~~ unobstructed Vertical Clearance of thirteen feet, six inches (13' 6"). Clearance shall be maintained at all times.

(c) Where a One-way Road with a single Traffic Lane leads to a gated entrance, a forty (40) foot turning radius shall be ~~provided~~ used as illustrated on Figure 7.

(d) All gates on a Driveway shall be located at least thirty (30) feet from the Road and shall ~~either slide sideways or~~ open in direction of ~~travel~~ ingress to the parcel, in accordance with Figure 7.

**Commented [AJW35]:** The requirement for 14-foot Clear Width appears to conflict with the provision for 10-foot wide gates (since the gate posts, etc. for a 10-foot gate will necessarily be within the ostensible Clear Width area).

**Commented [AJW36]:** Any bidirectional road will have *two* directions of travel, but most common gates open in only one direction. It is thus necessary to specify which direction of travel is meant. Requiring the gate to open in the ingress direction will minimize obstruction to responding fire apparatus

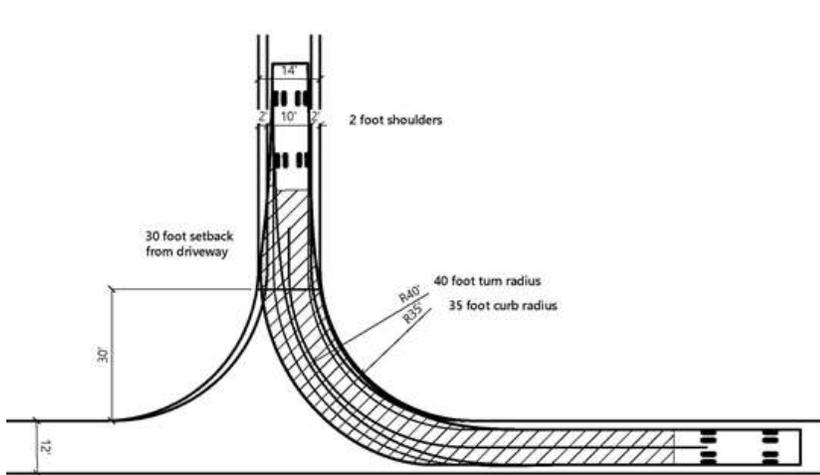


Figure 7

Effective Turn Radius for Gated Entrances/Driveways with Twelve Foot One-Way Main Road

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1273.12 Standards for Existing Roads

(a) Except as provided in subsections (b)(c) and (d), Existing Roads subject to § 1273.00(b) or (c)

shall meet the following minimum requirements:

- (1) One (1) fourteen (14) foot Traffic Lane;
- (2) Native-surfacing for no more than 50% of the Road's length; and
- (3) Turnouts in compliance with § 1273.09 (Road and Driveway Turnouts), or maintains

a twenty (20) foot Clear Width suitable to serve as a Traffic Lane for the length of the Road.

**Commented [AJW37]:** As noted above, and in our cover letter, requiring individual property owners, businesses, and small developments to upgrade public roads to these standards – and precluding any building if those standards are not met – is grossly inappropriate and disproportional to the impact of those developments. These requirements (and associated costs to upgrade public roads, and potential preclusion if such upgrades are not possible) are properly limited to existing roads serving larger developments.

~~(b) Access to Buildings after a Wildfire shall provide for at least one (1) fourteen (14) foot Traffic Lane for a distance of at least twenty two (22) feet at an interval of at least every 400 feet; provided, however, where such Traffic Lanes are not possible due to physical site limitations such as localized topography, slope stability or soil conditions, Access shall provide for locations for vehicles to pass each other at reasonable intervals.~~

~~(eb) Existing Roads subject to § 1273.00(b) or (c) providing Access to Buildings shall not exceed a grade of 25% over a distance of 500 linear feet.~~

~~(ec) An Existing Road with a secondary route in conformance with § 1273.13 (Secondary Routes for Existing Roads) need not comply with subsection (a) or (b).~~

~~(d) The standards in this section shall not apply to portions of Existing Roads in environmentally sensitive areas (e.g., creeks, streams, oak woodlands, sensitive and protected species habitat areas) or where compliance would require the removal or severe pruning of native trees that have a circumference of 37.7 inches or more (12 inches or more in diameter) measured at 4.5 feet above the ground or immediately below the lowest branch, whichever is lower, or in the case of multi-trunk trees a trunk size of 75.4 inches in circumference or more (24 inches or more in diameter) or where compliance is not Feasible.~~

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code, Section 51178 Government Code.

#### § 1273.13 Secondary Routes for Existing Roads

(a) Secondary routes used to satisfy the requirements of Section 1273.12, subdivision (c) shall meet the standards for New Roads in this Subchapter and shall provide for legal and deeded

**Commented [AJW38]:** As discussed in our cover letter, the requirements for roads providing access to “Buildings that are being reconstructed after a Wildfire” (ISOR, p. 32) conflicts with the ostensible exemption of “the reconstruction or repair of a Building due to a Wildfire” from these regulations (§ 1270.03(c)) – and with the repeated statements of Board members regarding their intent to completely exempt “wildfire rebuilds.” (If such rebuilds are truly exempt, there is no occasion for a special standard.)

These requirements would impose considerable burden and expense upon wildfire victims, and would render rebuilding financially infeasible in many cases. This provision should be eliminated, in favor of the unambiguous and honest exemption of rebuilding activities set forth in our comments above.

Access that serves as a typical travel way to and from the Building construction. A secured secondary route shall meet the requirements in § 1273.11 (Gates).

(b) Secondary routes used to satisfy the requirements of Section 1273.12, subdivision (c) shall connect a user to an alternative route that would not be affected by a closure to the primary route, to the extent practicable.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

### Article 3. Signing and Building Numbering

#### § 1274.00. Road Name Signs.

(a) All Road signs erected after the effective date of the regulations amending this section shall conform to the requirements of the California Manual of Uniform Traffic Control Devices (CA MUTCD), hereby incorporated by reference.

(b) New Roads shall be identified by a name or number through a consistent system that provides for sequenced or patterned numbering and non-duplicative naming within each Local Jurisdiction. This section does not require any entity to rename or renumber existing roads.

(c) The size of letters, numbers, and symbols for road signs shall be a minimum four (4) inch letter height, half inch (.5) inch stroke, reflectorized, contrasting with the background color of the sign.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1274.01. Road Signs.

**Commented [AJW39]:** Consistent with statements made by Board staff at numerous public events that this regulation is not retroactive, this change is intended to avoid any implication that these regulations "retroactively" require replacement of existing road signs by public agencies.

(a) Signs required by this article identifying intersecting roads shall be placed at the intersection of those roads.

(b) A sign identifying traffic limitations, including but not limited to weight or Vertical Clearance limitations, Dead-end Roads, One-way Roads, or single lane Roads and bridges, shall be placed:

- (1) at the intersection preceding the traffic limitation, and
- (2) no more than one hundred (100) feet before such traffic limitation.

(c) Road signs required by this article shall be posted at the beginning of construction and shall be maintained thereafter.

(d) Road signs shall meet the minimum sign retroreflectivity requirements in the CA MUTCD. Signs that are not required to meet the retroreflectivity requirements (e.g., blue or brown backgrounds) shall be retroreflective or illuminated to show the same shape and color by both day and night.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1274.02. Addresses for Buildings.

(a) All Buildings except those classified as Storage Group S or Utility and Miscellaneous Group U in the California Building Code shall be issued an address by the Local Jurisdiction consistent with the standards in the California Fire Code, California Code of Regulations title 24, part 9.

(b) Addresses for ~~residential~~ Buildings or property shall be reflectorized.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

Article 4. Water Supply.

§ 1275.00. Application.

(a) The provisions of this Article shall apply in the tentative and parcel map subdivision process when new parcels are approved by the Local Jurisdiction having authority. Except as otherwise provided in this Article, the provisions of this Article shall also apply.~~or~~ when new Building construction meeting the criteria in § 1273.00(c) is not already served by an existing water supply.

(b) ~~These~~ regulations shall apply only to newly constructed water facilities that primarily serve new development, and shall not apply to water facilities that are not newly constructed, or to water facilities, whether existing, upgraded, or newly constructed, that primarily serve existing development. These regulations shall not apply to existing water or wastewater facilities that are not newly constructed, or to existing water or wastewater facilities that are repaired, reconstructed, or upgraded. For purposes of this subsection, "water and wastewater facilities"

includes, but is not limited to, water storage tanks and reservoirs, pump stations, treatment facilities, regulator stations, Fire Hydrants, and similar water and wastewater system devices.

(c) Where a specific code standard from the California Fire Code or National Fire Protection Association (NFPA) is referenced in this Article, any sections of the California Fire Code or NFPA standards regarding alternative methods of compliance, equivalencies, or modifications to the specified standards shall also apply.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

**Commented [AJW40]:** This draft proposes to substantially expand the water supply requirements from the subdivision stage, to all Building Construction. While this is reasonable and sensible for some requirements, it is overly burdensome for others.

As with the road standards, a tiered and balanced approach toward water supply requirements is critical. Having a modernized, fully built, community scale water system is plainly desirable for any development; however, requiring individuals and small businesses to construct such systems, at their own expense, as a condition of any "Building Construction" is inequitable, and would place homeownership (among other things) further out of reach for all but the richest Californians.

We recommend making the full suite of requirements applicable to larger developments, with more tailored applicability in the case of smaller developments.

**Commented [AJW41]:** This language more clearly expresses the intent discussed on the record at Board workshops with water agency representatives – and reflected in the ISOR (i.e., "specifically focus these standards on *new water and wastewater systems that are constructed to meet the water supply requirements of new development only*" – p. 36).

§ 1275.01. Approved Water Supply.

(a) Water supply for all Building construction, of any size, shall meet or exceed the California Fire Code, California Code of Regulations Title 24, Part 9.

(b) Where a Municipal-Type Water Supply is not available, the Local Jurisdiction shall utilize the National Fire Protection Association (NFPA) 1142, “Standard on Water Supplies for Suburban and Rural Fire Fighting,” 2017 Edition, hereby incorporated by reference, as referenced in the California Fire Code, California Code of Regulations Title 24, Part 9, Appendix B and Appendix BB.

(c) All Building construction, of any size, shall include a water supply for structure defense.

Such protection shall be serviceable prior to and during the time of construction, except when alternative methods of protection are provided and approved by the Local Jurisdiction.

(d) Nothing in this article prohibits the combined storage of Wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the ~~Local~~ Fire Authority. Water supplies required under the California Fire Code, California Code of Regulations Title 24, Part 9, or other law or regulation may also be used to satisfy the requirements of this Article, so long as the full amount of water supply required by this article is provided.

(e) Where freeze or crash protection is required by the Local Jurisdictions, such protection measures shall be provided.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1275.02. Identification of Water Sources.

(a) Fire Hydrants or water access located along a Driveway shall be identified by at least (1) reflectorized blue marker, with a minimum dimension of three (3) inches. This marker shall be either (i) mounted on a fire retardant sign post or (ii) affixed to the driveway surface that is either paving or concrete. The sign post shall be located and mounted as specified by the Fire Authority.

(b) Fire Hydrants or water access located along a Road shall be identified by a reflectorized blue marker, with a minimum dimension of three (3) inches. This marker shall be either (i) mounted on a fire-retardant sign post or (ii) affixed to the driveway surface that is either paving or concrete. The sign post shall be within ~~three-five~~ (35) feet of the Fire Hydrant or water access. The sign shall be no fewer than three (3) nor greater than five (5) feet above ground, in a horizontal position, and visible from the Road, or as otherwise specified by the Fire Authority.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1275.03. Secured Water Sources.

Break away locks or similar systems approved by the Local Jurisdiction shall provide fire fighters with access to any water connections, valves, or controls that are normally secured by gates, doors, or other locking systems.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1275.04. Municipal-Type Water System Hydrants.

(a) The Municipal-Type Fire Hydrant shall be eighteen (18) inches above the finished surface measured from the center of its lowest outlet. Its location in relation to the Road or Driveway and to the Building(s) or structure(s) it serves shall comply with California Fire Code, California Code of Regulations Title 24, Part 9, Chapter 5, and Appendix C.

(b) The Municipal-Type Fire Hydrant shall be sizes designated by the Local Jurisdiction, in consultation with the Fire Authority, and shall have male American National Fire Hose Screw Threads (NH).

(c) Where Municipal-Type water supply Fire Hydrant systems are not practical due to the absence of a Municipal-Type Water System, or other limiting factors, a performance-based water supply alternative approved by the Local Jurisdiction, in consultation with the Fire Authority, shall be designed and installed to meet the minimum fire flow water supply requirements of 250 gallons per minute (gpm) for two (2) hours.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1275.05. Dry Hydrants

When dry hydrants have been approved by the Local Jurisdiction, the requirements of NFPA 1142 (2017) Chapter 8 (8.3, 8.4, 8.5, 8.6, 8.7 and 8.8), hereby incorporated by reference, shall be met.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1275.06. Mobile Water Supply (Water Tenders)

(a) Fire water delivery systems that rely on mobile water supply (water tenders) shall only be permitted under either of the following conditions:

(1) During the construction phase of a new Development, prior to the permanent fire water delivery system installation; or,

(2) When the Local Jurisdiction determines that all other means of water supply is not practical.

(b) The mobile water supply shall, within five (5) minutes of the arrival of the first Fire Apparatus on-scene, be capable of providing the Fire Apparatus with a minimum 250 gpm for a 2-hour duration or as otherwise approved by the Fire Authority.

(c) Mobile water supplies may use NFPA 1142 (2017) Annex C, hereby incorporated by reference, to achieve minimum fire flow requirements.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1275.07. Protection of Water Supply Infrastructure from Wildfire.

(a) All water supply infrastructure shall be protected from Wildfire radiant heat, convective heat, and embers by at least one of the following:

(1) underground burial; or

(2) construction of non-combustible materials, fittings and valves, such as concrete or metal; or

(3) maintenance of a 100-foot, slope-adjusted defensible space immediately surrounding the infrastructure; or

(4) placement within a Building constructed to the requirements of the California Building Code (California Code of Regulations Title 24, Part 2) Chapter 7A.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### Article 5. Building Siting, Setbacks, and Fuel Modification

##### § 1276.00. Applicability

(a) All New Building construction shall comply with the following provisions of this Article: § 1276.01 (Building and Parcel Siting and Setbacks); § 1276.02(c) (Ridgelines); and § 1276.06 (Disposal of Flammable Vegetation and Fuels).

(b) The following provisions of this article shall further apply in the tentative and parcel map subdivision process for proposed new parcels: § 1276.01 (Building and Parcel Siting and Setbacks); § 1276.02(c) (Ridgelines); § 1276.03 (Fuel Breaks); § 1276.04 (Greenbelts, Greenways, Open Spaces and Parks); § 1276.05 (Maintenance of Fuel Breaks); and § 1276.06 (Disposal of Flammable Vegetation and Fuels).

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

##### § 1276.01. Building and Parcel Siting and Setbacks.

(a) ~~All parcels Building construction subject to these regulations shall provide be set back a minimum of thirty (30) ~~foot setback~~ feet ~~for all Buildings~~ from all property lines and ~~or from~~ the center of any Road right-of-way, except as provided for in subsection (b). This requirement does not apply to Building construction that is entirely below ground.~~

**Commented [AJW42]:** This provision has been re-worded for clarity.

(b) A reduction in the minimum setback ~~shall~~ may be approved by the Local Jurisdiction be based upon practical reasons, which may include but are not limited to, parcel dimensions ~~or~~ size, or layout; location of existing Buildings; topographic limitations; development density requirements or other development patterns that promote low-carbon emission outcomes; sensitive habitat; or other site constraints. When a reduction in the minimum setback is approved, and the Building construction shall to the extent Feasible reduce Structure-to-Structure ignition by incorporating features such as, but not limited to:

(1) non-combustible block walls or fences; or

(2) five (5) feet of non-combustible material extending five (5) feet horizontally from the furthest extent of the Building; or

(3) installing hardscape landscaping or reducing exposed windows on the side of the Structure with a less than thirty (30) foot setback; or

(4) additional structure hardening that exceeds the requirements in the California Building Code, California Code of Regulations Title 24, Part 2, Chapter 7A.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

§ 1276.02. Ridgelines.

(a) The Local Jurisdiction shall identify strategic Ridgelines, if any, in consultation with the Fire Authority. Strategic Ridgelines shall be identified through an assessment of the following factors:

(1) Topography;

(2) Vegetation;

- (3) Proximity to any existing or proposed residential, commercial, or industrial land uses;
- (4) Ability to support effective fire suppression; and
- (5) Other factors, if any, deemed relevant by the Local Jurisdiction and Fire Authority.

(b) Preservation of Undeveloped Ridgelines identified as ~~strategically important~~strategic pursuant to subdivision (a) shall be required.

(c) New Buildings on Undeveloped Ridgelines identified as strategic pursuant to subdivision (a) ~~strategically important~~ are prohibited unless application of such prohibition would take or damage private property for public use under the Constitution of the State of California or the United States. Nothing in this subsection shall be construed to alter the extent to which Structures or Development other than Buildings, such as but not limited to a wireless telecommunications facility, as defined in Government Code section 65850.6, subdivision (d)(2), or Storage Group S or Utility and Miscellaneous Group U Structures, may be constructed on Undeveloped Ridgelines.

(d) The Local Jurisdiction may implement further specific requirements to preserve Undeveloped Ridgelines.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1276.03. Fuel Breaks

(a) When Building construction meets the ~~following criteria~~criteria of §1270.00(c), the Local Jurisdiction shall determine the need and location for Fuel Breaks in consultation with the Fire Authority.

~~(1) the permitting or approval of three (3) or more new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d); or~~

~~(2) an application for a change of zoning increasing zoning intensity or density; or~~

~~(3) an application for a change in use permit increasing use intensity or density.~~

(b) Fuel Breaks required by the Local Jurisdiction shall be located, designed, and maintained in a condition that reduces the potential of damaging radiant and convective heat or ember exposure to Access routes, Buildings, or infrastructure within the Development.

(c) Fuel Breaks may be required at locations such as, but not limited to:

(1) Directly adjacent to Defensible Space to reduce radiant and convective heat exposure, ember impacts, or support fire suppression tactics;

(2) Directly adjacent to Roads to manage radiant and convective heat exposure or ember impacts, increase evacuation safety, or support fire suppression tactics;

(3) Directly adjacent to a Hazardous Land Use to limit the spread of fire from such uses, reduce radiant and convective heat exposure, or support fire suppression tactics;

(4) Strategically located along Ridgelines, in Greenbelts, or other locations to reduce radiant and convective heat exposure, ember impacts, or support community level fire suppression tactics.

(d) Fuel Breaks shall be completed prior to the commencement of any permitted construction.

(e) Fuel Breaks shall be constructed using the most ecologically and site appropriate treatment option, such as, but not limited to, prescribed burning, manual treatment, mechanical treatment, prescribed herbivory, and targeted ground application of herbicides.

(f) Fuel Breaks constructed pursuant to this section shall have, at a minimum, one point of entry for fire fighters and any Fire Apparatus. The specific number of entry points and entry

requirements shall be determined by the Local Jurisdiction in consultation with the Fire Authority.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1276.04. Greenbelts, Greenways, Open Spaces and Parks

(a) Where a Greenbelt, Greenway, open space, park, landscaped or natural area, or portions thereof, is intended to serve as a Fuel Break, the space or relevant portion thereof shall conform with the requirements in § 1276.03 (Fuel Breaks).

(b) Local Jurisdictions may, as part of approval of new development, require Greenbelts or Greenways or other open areas for the purpose of providing potential areas of refuge for the public or firefighters or other values as a last resort, if safe evacuation is not practicable.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1276.05. Maintenance of Fuel Breaks

(a) Where a Local Jurisdiction requires Fuel Breaks pursuant to § 1276.03 (Fuel Breaks), maintenance mechanisms shall be established to ensure the fire behavior objectives and thresholds are maintained over time.

(b) The mechanisms required shall be binding upon the property for which the Fuel Break is established, shall ensure adequate maintenance levels, and may include written legal agreements;

permanent fees, taxes, or assessments; assessments through a homeowners' association; or other funding mechanisms.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

#### § 1276.06 Disposal of Flammable Vegetation and Fuels

The disposal, including burning or removal to a site approved by the Local Jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction shall be in accordance with all applicable laws and regulations.

Note: Authority cited: Section 4290, Public Resources Code. Reference: Sections 4290 and 4291, Public Resources Code.

**WANGER JONES HELSLEY PC**  
ATTORNEYS

OLIVER W. WANGER  
TIMOTHY JONES\*  
MICHAEL S. HELSLEY  
RILEY C. WALTER  
PATRICK D. TOOLE  
SCOTT D. LAIRD  
JOHN P. KINSEY  
KURT F. VOTE  
TROY T. EWELL  
JAY A. CHRISTOFFERSON  
MARISA L. BALCH  
AMANDA G. HEBESHA\*\*  
PETER M. JONES†  
MICHAEL L. WILHELM†  
STEVEN M. CRASS†  
DEBORAH K. BOYETT  
STEVEN K. VOTE  
GIULIO A. SANCHEZ  
CHRISTOPHER A. LISIESKI\*\*\*  
BENJAMIN C. WEST  
HUNTER C. CASTRO  
STEPHANIE M. HOSMAN  
DANIELLE M. PATTERSON  
AMBER N. LES  
GARRETT R. LEATHAM††  
HEIDI G. WEINRICH

\* Also admitted in Washington  
\*\* Also admitted in Idaho  
\*\*\* Also admitted in Virginia  
†† Also admitted in Utah  
† Of Counsel

265 E. RIVER PARK CIRCLE, SUITE 310  
FRESNO, CALIFORNIA 93720

MAILING ADDRESS  
POST OFFICE BOX 28340  
FRESNO, CALIFORNIA 93729

TELEPHONE  
(559) 233-4800

FAX  
(559) 233-9330



OFFICE ADMINISTRATOR  
LYNN M. HOFFMAN

Writer's E-Mail Address:  
jkinsey@wjhattorneys.com

Website:  
www.wjhattorneys.com

June 21, 2021

**VIA EMAIL**

Board of Forestry and Fire Protection  
**Attention: Edith Hannigan**  
Land Use Planning Program Manager  
P.O. Box 944246  
Sacramento, CA 94244-2460

**Re: Comments on Proposed "State Minimum Fire  
Safety Regulations, 2021"**

Dear Ms. Hannigan and Members of the California Board of Forestry and Fire Protection:

I am submitting the following comments on behalf the Rural County Representatives of California ("RCRC") concerning the California Board of Forestry and Fire Protection's ("BOF") proposed "State Minimum Fire Safety Regulations, 2021" (the "Regulations"), which seek to amend various provisions of Title 14, Division 1.5, Chapter 7 of the California Code of Regulations.

RCRC requests that BOF decline to adopt the Regulations as currently formulated. RCRC has significant concerns regarding the provisions of the Regulations that mandate design specifications for new and existing roadways. These aspects of the Regulations would adversely affect RCRC's members, natural resources, and California residents and businesses, and should be modified substantially. Moreover, due to the economic and environmental impacts of the

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Regulations, BOF must fully discharge its obligations under the California Administrative Procedures Act, Govt. Code, § 11350, *et seq.* (the “APA”), and the California Environmental Quality Act, Pub. Resources Code, § 21000, *et seq.* (“CEQA”) before it may consider the Regulations for adoption.

In support of these comments, I have enclosed reports from the following experts concerning the potential adverse effects of the Regulations: (i) Dave Hartesveldt, Live Oak Associates, Inc., attached as Exhibit “A”; (ii) Dirk Poeschel, Land Development Services, Inc., attached as Exhibit “B”; and (iii) Rick P. Smith, Aaron Realty Group, attached as Exhibit “C.”

### **I.**

#### **INTRODUCTION**

RCRC understands the importance of developing robust fire safety regulations and practices. RCRC, however, has several significant concerns about the currently proposed Regulations, including the potential financial and economic impacts of requiring the construction and improvement of roads in rural and remote areas to specific design standards.

RCRC believes the Regulations, as currently constituted, would hinder private investment and development in rural communities and diminish the property values of both developed and undeveloped parcels that are otherwise suitable for residential development. The Regulations will also result in the imposition of substantial additional costs to private individuals who seek to develop or improve properties within State Responsibility Areas (“SRAs”) and Very High Fire Hazard Severity Zones within Local Responsibility Areas (“VHFHSZs”). The Regulations also have the likelihood of significantly impeding development within SRAs and VHFHSZs, which will negatively impact local businesses by eliminating potential year-round customers and members of the workforce, and the local construction industry.

The Regulations will also result in significant effects on the environment. Indeed, the primary purpose of the Regulations is to widen and improve existing and new roadways and driveways, causing a larger construction footprint than is currently required. This widening has the potential to result in numerous significant environmental effects, including negative effects on natural resources, cultural/historic resources, and aesthetics adjacent to non-conforming roadways. The roadway widening has the potential to increase vehicle miles traveled (“VMTs”), induce growth, and increase criteria pollutant and greenhouse gas (“GHG”) emissions compared to baseline conditions.

We hope BOF will seriously consider these comments and direct BOF staff to address the insufficiencies RCRC identifies herein and to incorporate these recommendations in the final Regulations by adopting RCRC’s alternative to the Regulations, which has been sent concurrently with this letter under separate cover. At the March 22, 2021, Board meeting, Board members expressed a willingness to incorporate interested parties’ edits and indicated that an additional 45-

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day comment period could be opened prior to final approval. RCRC would greatly appreciate such an opportunity to provide further comment after our recommendations are considered.

We thank you for the opportunity to comment, and we look forward to participating in the public meeting on the proposed Regulations, scheduled for June 22, 2021.

## **II.**

### **ECONOMIC ASSESSMENT UNDER THE CALIFORNIA APA**

#### **A. BOF's Analysis of Alternatives Under the APA**

The Legislature requires state agencies, such as BOF, to avoid unnecessary or unduly burdensome regulation. To this end, the Legislature requires agencies to analyze alternatives to the proposed action. "Reasonable alternatives to be considered include, but are not limited to, alternatives that are proposed as less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation." (Govt. Code, § 11346.2, subd. (b)(4)(A).)

BOF may not adopt regulations unless it has determined no alternative to its proposal would be "as effective and less burdensome to affected private persons than the proposed action, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law." (Govt. Code, § 11346.5, subd. (a)(13).) Likewise, in the initial statement of reasons, BOF must affirm and explain, with "supporting information," that "no alternative" it has considered "would be more effective and less burdensome to affected private persons than the adopted regulation, or would be more cost effective to affected private persons and equally effective" in meeting the proposal's legislative objective. (Govt. Code, § 11346.9(a)(4) [emphasis added].)

In this case, BOF has failed to adequately consider two alternatives: (i) the proposed revisions to the Regulations conveyed to BOF staff by various county associations on June 21, 2021, and (ii) a regulation utilizing performance-based standards instead of the prescriptive standards described in the Regulation. (See ISOR at 50.)

***The Regulations Would Cause Significant Burdens on Private Persons.*** As an initial matter, there can be no reasonable dispute that the Regulations would impose significant and unprecedented burdens on private persons. The new driveway and roadway improvement requirements<sup>1</sup> would result in costs that would ultimately render most residential projects

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<sup>1</sup> We note that earlier versions of the ISOR made clear that numerous types of roads would need to be actively "improved" to meet the Regulations' prescriptive standards. (See Exhibit "D.") Similar language appears in BOF's February 24, 2021, and March 3, 2021, Workshop Presentations. (See Exhibits "E," "F.") Such language was omitted

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financially infeasible. For example, in mountain and foothill areas, the construction of a new 20-foot-wide facility in foothill or mountain areas can cost from \$1.2–\$2.0 million/mile, and perhaps higher.<sup>2</sup> As explained in the accompanying analysis from Mr. Poeschel, such costs would essentially “preclude most new residential subdivisions in foothill and mountain communities in Central California.” (See Exhibit “B” at 4.) Several counties have echoed these concerns, commenting that the Regulations would essentially halt development in SRAs and VHFHSZs within LRAs. (See, e.g., June 8, 2021, Comment Letter from Mono County Development Department.)

Property owners who seek to build individual residences would also be adversely affected by the Regulations. In a “best case” scenario, most property owners would be required to expend an additional \$25,000 to \$75,000 in driveway construction costs to construct a home on their property. In most cases, this would represent a cost that the landowner would be unable to recoup in a subsequent sale. And even if an individual landowner could recover those costs in a subsequent sale, the additional costs would make housing in foothill and mountain communities even less affordable during the State’s current housing availability and affordability crisis. (See Exhibit “C” at 7.)

The Regulations would also result in an immediate drop in value for both developed and undeveloped properties adjacent to non-conforming facilities. As explained in Mr. Smith’s expert report accompanying this letter, the additional development costs for properties adjacent to non-conforming facilities would impair the marketability of those properties, thereby reducing the market value of such properties. (See, e.g., Exhibit “C” at 9 [“[I]f a non-recapturable improvement cost is mandated, that asset (the existing residence) must contract in value to now sufficiently attract qualified buyers in that market.”].) This immediate drop in value would significantly affect a large number of private persons who own land and live in SRAs and VHFHSZs.

The Regulations will also adversely impact rural businesses. Because residential development—and especially workforce housing—will become increasingly difficult to achieve, rural businesses in SRAs and VHFHSZs will experience increased labor shortages in what is

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from subsequent versions of the ISOR, which obscure the fact that numerous improvements would be required by stating regulated entities would merely need to “comply with” the Regulations.

<sup>2</sup> A review of several publicly available materials from other jurisdictions with fewer restrictions than California suggest \$1.2–\$2.0 million/mile may understate the cost of roadway/driveway development:

<https://www.fdot.gov/programmanagement/estimates/lre/costpermilemodels/cpmssummary.shtm> [\$2.55 million per mile in Florida (2020)]

<https://web.archive.org/web/20170318155340/https://www.modot.org/whatsitcost/> [\$1.8 million per mile in Missouri in 2013]

[https://web.archive.org/web/20111013092241/http://www.arkansashighways.com/roadway\\_design\\_division/Cost%20per%20Mile%20JULY%202011.pdf](https://web.archive.org/web/20111013092241/http://www.arkansashighways.com/roadway_design_division/Cost%20per%20Mile%20JULY%202011.pdf) [\$1.9 million per mile in Arkansas in 2011]

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already a tight labor market. Moreover, by discouraging residential development, rural businesses will be forced to rely increasingly on revenues from seasonal tourists, as opposed to more sustainable year-round patronage from nearby residents. (See Exhibit “B” at 6.)

**County Alternative.** Concurrently with this letter and under separate cover, RCRC, the California State Association of Counties (“CSAC”), and Urban Counties of California are jointly submitting a revised version of the Regulations (the “County Alternative”). The County Alternative provides more flexibility to counties to adopt local regulations that “substantially comply” with the Regulations; removes several of the prescriptive standards for lower-risk smaller residential projects and commercial/industrial projects under 27,000 square feet; removes some requirements for existing roads and driveways; and protects environmentally sensitive areas by limiting Clear Width requirements in such areas.

The County Alternative would be equally effective as the Regulation in implementing the statutory policies at issue here. (Govt. Code, § 11346.5, subd. (a)(13).) In this instance, the authorizing regulation is Section 4290 of the Public Resources Code. Section 4290 provides that the BOF must “adopt regulations implementing minimum fire safety standards related to defensible space” that “apply to the perimeters and access to all residential, commercial, and industrial building construction within state responsibility areas approved after January 1, 1991, and within lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code after July 1, 2021.” (Govt. Code § 4290, subd. (a).) These standards must include “[r]oad standards for fire equipment access[, s]tandards for signs identifying streets, roads, and buildings[, m]inimum private water supply reserves for emergency fire use[, and f]uel breaks and greenbelts.” (*Id.*, at subd. (a)(1)–(4).)

The County Alternative does not reduce the efficacy of any provision of the Regulations concerning signage, water supply, and fuel breaks/greenbelts. The primary differences in the County Alternative relate to the applicability of road standards, particularly to *existing* roads and driveways and small development projects. The County Alternative also furthers the statutory objectives here—*i.e.*, the adoption and implementation of fire safety standards.

Importantly, however, the County Alternative would avoid the significant burdens and costs of the Regulation on landowners. It would avoid a *de facto* moratorium on development, lessen the decline in value that would result from the Regulations, and continue to allow county governments to address housing affordability. It would likewise focus the burdens of roadway improvements on larger-scale development projects that are better-equipped to bear the financial burden of such improvements.

As a result of the foregoing, BOF should both assess and accept the County Alternative for adoption.

**Performance-Based Standards.** The ISOR notes that BOF “rejected” performance-based standards based on the assertion that “specific, prescriptive requirements are necessary to achieve

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fire safety.” (ISOR at 50.) The ISOR states, without evidentiary support, that “clear and enforceable” prescriptive requirements “are more effective than performance based measures.” (*Id.*) This conclusion is not supported by substantial evidence.

The conclusion in the ISOR is also illogical. If anything, a performance-based standard would be *more protective* than prescriptive standards, because they would ensure local governments and landowners construct improvements based on the actual objectives BOF seeks to achieve, rather than implementing a one-size-fits all approach that may be appropriate for some geographic areas but not others. Indeed, by adopting prescriptive standards, BOF runs the risk of creating standards that are far too onerous in many instances, but that are insufficient to achieve BOF’s objectives in others.

Performance-based standards are also superior to prescriptive standards because they provide local governments and landowners multiple means to comply with a regulation. This flexibility ultimately lessens the burden on local landowners by allowing landowners to implement the most cost-effective solution to achieve the performance-based standard. Due to the significant burdens of the regulation on landowners and local governments, and the fact that performance-based standards have the capability of being equally effective—if not more effective—than prescriptive standards, BOF staff should fully evaluate and consider an alternative that is built around the implementation of performance-based standards.

### **B. The Board’s Economic Impact Analysis**

Under the APA, state agencies proposing to “adopt, amend, or repeal any administrative regulation must first perform an assessment of “the potential for adverse economic impact on California business enterprises and individuals.” (Govt. Code § 11346.3, subd. (a).) Where an agency determines that a proposed regulation is a “major regulation”—*viz.* the regulation will have “economic impact on California business enterprises and individuals” or more than \$50 million per year (1 Cal. Code Regs. § 2000(g))—the agency must prepare a full standard regulatory impact assessment (“SRIA”) under section 11346.3, subdivision (c). Where the agency finds that the impact will be less than \$50 million per year, the agency may prepare the relatively less extensive economic impact analysis (“EIA”). (Govt. Code § 11346.3, subd. (b).)

If, in the agency’s analysis, it determines that the regulation will *not* have a significant, statewide adverse economic impact, the agency must declare in the notice of proposed action any initial determination that the action will not have a significant statewide adverse economic impact directly affecting business. (Govt. Code § 11346.5, subd. (a)(8); *Western States Petroleum Assn v. Board of Equalization* (“WSPA”) (2013) 57 Cal.4th 401, 428.) Once the initial assessment is complete, “affected parties may comment on the agency’s initial determination and supply additional information relevant to the issue.” (WSPA, 57 Cal.4th at 429.) The agency “must respond to the public comments and either change the proposal in response to the comments or explain why it has not.” (*Id.*)

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Courts evaluate determinations under the APA for whether the agency “substantially complied with its obligations, and whether [the agency’s determination] is supported by some substantial evidence.” (*John R. Lawson Rock & Oil, Inc. v. Air Resources Board* (2018) 20 Cal.App.5th 77, 112 [quoting *Calif. Ass’n of Medical Prods. Suppliers v. Maxwell-Jolly* (2011) 199 Cal.App.4th 286 307].)

As an initial matter, BOF may not rely upon a mere EIA, and must instead prepare a SRIA, as the economic impact of the Regulations will be far more than \$50 million/year. (Govt. Code § 11346.3, subd. (b).) First, there is no substantial evidence in the record to support this conclusion, or even a quantitative assessment of the potential costs of the regulation on private persons. Indeed, this conclusion appears to have been informed by the assertion that “[i]mplementation costs are likely to fall on local jurisdictions and not onto private individuals or businesses . . . .” (ISOR at 45-46.) These assertions are plainly inaccurate. Rather, the burden of constructing new facilities and improvements virtually always falls on developers and landowners as conditions of approval. “These exactions are commonplace in the development process and are a feature of virtually every project approval where facility improvements are required.” (Exhibit “B” at 5.) Indeed, even the ISOR suggests the funding for the roadway improvements would come from “levy[ing] services changes, fees, or assessments” on private persons. (ISOR at 5.) And even if this were not so, County governments generally lack the funding to install new roadway improvements to benefit new development. (See, e.g., Exhibit “B.”) As a result, the entire burden of the Regulations will inevitably fall on private individuals and California businesses.

Moreover, BOF’s economic analysis appears to be based not on objective data, but assertions regarding the BOF’s alleged “extensive knowledge and experience.” (ISOR at 47.) This is too vague to constitute substantial evidence. In any event, these assertions—made without reference to supporting evidence or data—amount to “mere speculative belief,” which was condemned as insufficient by the Supreme Court. (*WSPA, supra*, 57 Cal.4th at 428 [quoting *Maxwell-Jolly, supra*, 199 Cal.App.4th at 305-06].)

There also be no doubt that the potential costs of the Regulations will be greater than \$50 million/year. In Nevada County, for example, 42% of the undeveloped parcels within the county (4,975 total) are not adjacent to conforming roads. Conservatively assuming each of those parcels would only be required to construct a quarter mile of new roadways/driveways—which is highly unlikely—the total roadway improvement costs in 2021 dollars would approach \$2.5 billion.<sup>3</sup> Notably, this represents the total costs for just one of fifty-eight counties in California. And this does not include the additional costs for the owners of developed lots who are required to improve driveways and roadways as a condition of additional permits or entitlements.

BOF has also failed to include an adequate analysis of the economic impacts of the Regulations under other provisions of the APA. First, Section 11346.5(a)(9) of the Government Code requires BOF to prepare a “description of all cost impacts, known to the agency at the time

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<sup>3</sup> \$2 million/mile x 0.25 miles x 4,975 undeveloped parcels = \$2.49 *billion*.

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the notice of proposed action is submitted to the office, that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.” The ISOR plainly does not include any such analysis, even though the costs to private persons would be significant. (See *supra*, § II.A.)

The APA also requires BOF to perform an assessment of the Regulation’s effect on small businesses. (See, e.g., Govt. Code, § 11346.5, subd. (a)(7) [requiring CARB to determine whether the Proposed Amendment “may have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states,” including identification of the types of businesses affected]; 1 Cal. Code Regs., § 4 [requiring assessment of whether the regulation would affect small businesses and, if applicable, a statement as to why such a result would not occur].)

The ISOR’s discussion of this issue is incomplete and inaccurate. As explained above, the discussion is largely based on the assumption that “[i]mplementation costs are likely to fall on local jurisdictions and not onto private individuals or businesses,” (ISOR at 45-46), and that the Regulations would “not eliminate existing businesses within California.” (*Id.* at 46.) As explained in the expert report of Dirk Poeschel, these assertions are plainly inaccurate, as the burden of constructing new facilities and improvements virtually always falls on developers and landowners as conditions of approval. (Exhibit “B” at 5.)

Nor can BOF credibly assert the Regulations will not affect small businesses in foothill and mountain communities. “Businesses in foothill and mountain communities rely upon employees who live in those communities or nearby, and local residents to patronize their businesses.” (*Id.* at 6.) As explained in the Poeschel report, however, “the Regulations will result in most new residential development in foothill and mountain communities coming to a halt, with the potential exception of luxury and vacation communities. In other words, the Regulations have the potential to reduce the pool of potential employees and at the same time limit the economic opportunities for those businesses.” (*Id.*) These potential impacts on foothill and mountain businesses should be fully assessed prior to BOF’s consideration of the Regulations for adoption.

The Regulations are also likely to eliminate jobs and hinder the creation of new jobs in California. (Govt. Code, § 11346.3, subd. (b)(1)(A).) Although the ISOR asserts “[n]o creation or elimination of jobs will occur as a result of this action,” there is no evidence or citation to support this assertion. The evidence, in contrast, shows jobs will be affected by the Regulations, as explained above and in the Poeschel report.

Moreover, several counties have explained that the Regulations would essentially impose a moratorium on development within SRAs and VHFHSZs. By limiting construction, the Regulations will affect foothill and mountain contractors and construction-related businesses, all of which rely upon construction to support their businesses. Given the likelihood that the Regulations would impede construction on foothill and mountain communities, BOF should fully assess the economic impact of the Regulations on the construction industry.

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BOF should substantially revise the conclusions in the ISOR concerning the economic impacts of the Regulations, and prepare a SRIA for submission to the Department of Finance.

**III.**

**ENVIRONMENTAL REVIEW UNDER CEQA**

**A. Introduction**

State agencies, such as the BOF, must “refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects.” (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1421 [citing *Mountain Lion Found. v. Fish & Game Comm.* (1997) 16 Cal.4th 105, 134].) To perform this evaluation, BOF must “first . . . identify the environmental effects” of the Regulations “and then . . . mitigate [any] adverse effects through the imposition of feasible mitigation measures or through the selection of feasible alternatives.” (*Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1233.)

The broad policy goals of CEQA include: (1) providing public agencies and the public with detailed information about the effect that a proposed project is likely to have on the environment, (2) identifying the ways in which the significant effects of a proposed project might be minimized, and (3) identifying alternatives to the proposed project. (See Pub. Res. Code §§ 21002, 21002.1(a), 21061; CEQA Guidelines, § 15362.)

“The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish. This examination is intended to provide the fullest information reasonably available upon which the decision makers and the public they serve can rely in determining whether or not to start the project at all, not merely to decide whether to finish it.” (*NRDC v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271.)

The BOF must respond to the issues raised by the public by providing a “good faith, reasoned analysis in response, and at a level of detail that matches the level of detail in the comment.” (CEQA Guidelines, § 15088(c); *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.) If the Board disagrees with the “recommendations and objections raised in the comments,” the “recommendations and objections” “must be addressed in detail,” with the agency “giving reasons why specific comments and suggestions were not accepted.” (CEQA Guidelines, § 15088(d).) “Conclusory statements unsupported by factual information will not suffice.” (*Id.*)

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**B. Because the Regulations Have the Potential to Result in Direct and Reasonably Foreseeable Indirect Effects on the Environment, BOF Must Comply with CEQA**

Thus far, the Board has deferred any determination of whether CEQA even applies to the adoption of the amended Regulations. The Regulations, however, are plainly a “project” under CEQA.

The term “project” is used to refer to an activity subject to CEQA. (Pub. Resources Code, § 21080, subd. (a); CEQA Guidelines, § 15002(d).) A “project” subject to CEQA is an activity that may cause “either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” (Pub. Resources Code, § 21065.) The term “project” includes the “whole of an action” that has the “potential for resulting” in a direct or reasonably foreseeable indirect physical change to the environment. (CEQA Guidelines, § 15378; see also *Union of Med. Marijuana Patients, Inc. v. City of San Diego* (2019) 7 Cal.5th 1171, 1188-89; *Muzzy Ranch Co. v. Solano County Airport Land Use Comm’n* (2007) 41 Cal.4th 372, 381.)

There can be no reasonable dispute that the Regulations have the potential to result in direct and/or reasonably foreseeable indirect effects on the environment, as described below:

***Potential Impacts to Natural Resources.*** As explained in the expert report of David Hartesveldt, the Regulations have the potential to significantly effect natural resources. For example, the roadway and driveway construction/widening contemplated by the Regulations<sup>4</sup> could threaten the habitat or result in the “take” of threatened, endangered and protected species in foothill and mountain areas. These species including the Valley Elderberry Longhorn Beetle (VELB), the California Tiger Salamander (CTS), the Vernal Pool Fairy Shrimp, the Southern Sierra Distinct Population Segment of Fisher, the California Red-legged Frog (CRLF), and the Blunt-nosed Leopard Lizard (BNLP). (See Exhibit “A” at 3-4.)

Road improvements and fuel break projects can result in the mortality of nesting birds, which is unlawful under the Federal Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712, and the California Fish & Game Code. (See Exhibit “A” at 4-5.) These activities can also negatively affect raptors and other birds of prey, particularly during nesting season, which is also a violation of the federal Bald and Golden Eagle Protection Act, 16 U.S.C. § 668 and the California Fish and Game Code. (See Exhibit “A” at 5-6.)

In foothill and mountain areas, road construction and widening projects can also “disturb hydrologic features such as creeks and wetlands providing functions and values important to the larger public interest.” (Exhibit “A” at 6-7.) This includes the potential fill or grading of adjacent wetlands that are considered “waters of the United States” or “jurisdictional waters” subject to the

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<sup>4</sup> See Footnote 1, *supra*.

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authority of the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. (*Id.*)

***Potential Impacts to Historic and/or Cultural Resources.*** Roadway construction and widening projects have the potential to negatively affect cultural resources. As recognized by Caltrans, the “consideration of cultural resources is a **critical** part of all phases of project development, construction, permitting, right of way, and maintenance activities.” (Caltrans Standard Environmental Reference (“SER”) [emphasis added].)<sup>5</sup> Such cultural resources can include prehistoric archeological resources, human remains requiring protection and repatriation, and other historic and cultural artifacts. (See *id.*) Properties with potential cultural or archeological resources are particularly common in foothill and mountain areas. (See Caltrans, Route 74 Safety Improvement Project IS(MND)/EA(FONSI), Chapter 3.)<sup>6</sup>

***Increased Vehicle Miles Traveled.*** One of the primary objectives of the Regulations is to enhance roadway capacities in SRAs and VHFHSZs to enable increased roadway capacity during wildfire events. According to CAPCOA, the addition of roadway capacity induces additional vehicle miles traveled (“VMT”) “by changing travel behavior such as trip length and mode use.” (CAPCOA, *Air Quality Analysis in CEQA Roadway Project Review* (August 2018) at 4 [hereinafter “CAPCOA Roadway Construction Guidance”].)<sup>7</sup> “A substantial body of research exists quantifying the increase in VMT induced by added roadway capacity.” (*Id.* [citing Handy, S. (2015) *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*<sup>8</sup>; Handy, S. and Boarnet, M. (2014). *Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions*<sup>9</sup>; Handy, S. and Boarnet, M. (2014). *Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions*<sup>10</sup>].) Because

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<sup>5</sup> Available at <https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-2-cultural-resources> (last visited June 19, 2021).

<sup>6</sup> Available at <https://dot.ca.gov/-/media/dot-media/district-12/documents/2-6-cultural-resources-a11y.pdf> (last visited June 19, 2021).

<sup>7</sup> California Air Pollution Control Officers Association, available at [http://www.capcoa.org/wp-content/uploads/2018/08/Air\\_Quality\\_Analysis\\_in\\_CEQA\\_Roadway\\_Project\\_Review.pdf](http://www.capcoa.org/wp-content/uploads/2018/08/Air_Quality_Analysis_in_CEQA_Roadway_Project_Review.pdf) (last visited June 19, 2021).

See also California Governor’s Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. [http://opr.ca.gov/docs/20180416-743\\_Technical\\_Advisory\\_4.16.18.pdf](http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf) (last visited June 19, 2021).

<sup>8</sup> National Center for Sustainable Transportation Policy Brief, available at [http://www.dot.ca.gov/research/researchreports/reports/2015/10-12-2015-NCST\\_Brief\\_InducedTravel\\_CS6\\_v3.pdf](http://www.dot.ca.gov/research/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf) (last visited June 19, 2021).

<sup>9</sup> California Air Resources Board Policy Brief, available at [https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway\\_capacity\\_brief.pdf](https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf) (last visited June 19, 2021).

<sup>10</sup> California Air Resources Board Technical Background Document, available at [https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway\\_capacity\\_bkgd.pdf](https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_bkgd.pdf) (last visited June 19, 2021).

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increased roadway capacity contemplated under the Regulations has the potential to induce VMTs, BOF must assess this impact prior to considering the Regulations for adoption.

***Air Quality Impacts/Climate Change.*** One of the primary purposes of the Regulations is to promote the expansion of existing roadways and driveways when such construction activities would not otherwise be required. Another objective of the Regulations is to expand the footprint of new roadways and driveways. Under either scenario, landowners, developers, and county governments will be required to deploy roadway construction crews where such crews were not previously needed, or deploy those crews for lengthier periods of time.

Roadway construction, of course, generates criteria pollutant and greenhouse gas emissions. “Construction can result in fugitive dust emissions and engine exhaust emissions from various types of activities . . . .”<sup>11</sup> As a result, lead agencies should assess air quality impacts of roadway projects “for construction . . . emissions for all projects under CEQA review.” (CAPCOA Roadway Construction Guidance at 3.) Potential sources of emissions associated with roadway construction projects include haul trucks, vehicle trips made by construction workers, and operational emissions from vehicle use on roadways.” (*Id.*) In addition, “construction and operation of roadways have the potential to generate significant toxic air pollutants that are detrimental to human health, regardless of duration.” (*Id.*) Although construction periods are temporary, an agency may not avoid evaluation of emissions associated with construction because that “would underestimate overall impacts and undermine the air district thresholds’ objective of meeting air quality standards.” (*Id.*) Because the Regulations will increase roadway construction activities, BOF cannot avoid analysis of these environmental effects.

The use of roadway construction equipment also increases greenhouse gas emissions. (*Caltrans Greenhouse Gas Emissions and Mitigation Report* (August 2020) at 9.)<sup>12</sup> In addition, roadway construction increases emissions associated with materials and fuels used in roadway construction and maintenance, including emissions from the production of concrete, steel, asphalt, and aggregates. (*Id.* at 11.) The Regulations will increase these emissions associated with the life cycle of these raw materials because they ultimately seek to increase the use of those materials.

Moreover, the additional VMTs induced by the expansion of roadway capacity have the potential to result in greater GHG emissions. As a result, BOD “should consider GHG emissions from VMT, including induced VMT, which can be quantified using readily available methods.”

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<sup>11</sup> Caltrans Project Level Air Quality Analysis, available at <https://dot.ca.gov/programs/environmental-analysis/air-quality/project-level-air-quality-analysis> (last visited June 19, 2021).

<sup>12</sup> Available at <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/office-of-smart-mobility-and-climate-change/ghg-emissions-and-mitigation-report-final-august-2-2020-revision9-9-2020-a11y.pdf> (last visited June 19, 2021).

See also Interim Guidance: Determining CEQA significant for GHG emissions, available at <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/tcc/2018/may/interim-guidance-may31.pdf> (last visited June 19, 2021)

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(CAPCOA Roadway Construction Guidance at 6 [citing California Air Resources Board Greenhouse Gas Emission Inventory – 2017 Edition<sup>13</sup>; California Air Resources Board, Updated Final Staff Report, Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets<sup>14</sup>].)

***Water Quality and Hydrology Concerns.*** Roadway construction and widening projects can result in discharges into waters of the State of California, which could adversely affect water quality. (Exhibit “A” at 6-7.)

***Aesthetic Impacts.*** CEQA requires analysis of a project’s impacts on “view and other features of beauty.” (*Ocean View Estates Homeowners Assn., Inc. v. Montecito Water Dist.* (2004) 116 Cal.App.4th 396, 401.) The Regulations have the potential to undermine the aesthetic values of foothill and mountain areas. For example, the Regulations require the installation of more hardscape than is otherwise required, resulting in the demolition of the natural landscape and tree resources.

***Growth-Inducing Impacts.*** Environmental documents under CEQA are required to discuss any growth-inducing impacts of the proposed project. (Pub. Resources Code, § 21100, subd. (b)(5); CEQA Guidelines, § 15126(d).) The document must discuss growth-inducing effects even though those effects may only result indirectly from the project. (See, e.g., *Napa Citizens for Honest Govt. v. Napa County Bd. of Supers.* (2001) 91 Cal.App.4th 342, 368.) The Regulations seek to require expanded roadways and driveways. Several scholars have concluded that roadway improvements and widening spur new travel, and ultimately induce growth and investment in areas served by the widened roadway. (See Cevero, R., *Road Expansion, Urban Growth, and Induced Travel: A Path Analysis* (2001)<sup>15</sup>; see also *City of Carmel-by-the-Sea v. U.S. Dept. of Trans.* (9th Cir. 1997) 123 F.3d 1142, 1165.)

***Agricultural Impacts.*** In foothill and mountain areas, many roadway facilities are located adjacent to grazing land, vineyards, and other agricultural resources. Widening roadway facilities would result in further encroachment onto these agricultural lands, which should be fully assessed by BOF prior to its consideration of the Regulations.

***Land Use Impacts.*** CEQA requires agencies to evaluate whether a proposed development project will, among other things, conflict with any land use plan, policy, or regulation of an agency with jurisdiction over a project. As explained above, the Regulations have the potential to induce growth in areas where landowners have the capability of complying with the Regulations. This inducement of growth will not always be aligned with the plan-level documents adopted by various

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<sup>13</sup> Available at <https://www.arb.ca.gov/cc/inventory/data/data.htm> (last visited June 19, 2021)

<sup>14</sup> Available at [https://www.arb.ca.gov/cc/sb375/sb375\\_target\\_update\\_final\\_staff\\_report\\_feb2018.pdf](https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf) (last visited June 19, 2021)

<sup>15</sup> Available at <https://escholarship.org/uc/item/05x370hr> (last visited June 19, 2021).

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county governments, resulting in the potential to frustrate the policies and objectives of plan-level documents adopted by affected county and city governments.

Moreover, RCRC understands that many county government representatives will testify that the Regulations will have the effect of undermining the policies and objectives of their adopted general and specific plans. As such, prior to the consideration of the Regulations for adoption, the BOF should assess the extent to which the Regulations will frustrate the objectives and policies of plan-level documents adopted by the county stakeholders.

***Cumulative Impacts.*** CEQA “require[s] a finding that a project may have a ‘significant effect on the environment’ if . . . [t]he possible effects of a project are individually limited but cumulatively considerable.” (Pub. Resources Code, § 21083.) A project’s cumulative impacts are significant if the project’s incremental contribution to the impact is “cumulative considerable.” (CEQA Guidelines, § 15130(a).) A Project’s incremental contribution is cumulatively considerable if the incremental effects of the project are significant “when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” (CEQA Guidelines, § 15065(a)(3).) The fact that a particular project’s incremental impact is not alone significant, or is relatively small when compared to the greater overall problem, does not mean the project does not have significant cumulative impacts. This theory was rejected in *Kings County Farm Bureau* because it would allow “the approval of projects which, when taken in isolation, appear insignificant, but when viewed together, appear startling.” (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 720-21.) The proper standard for a cumulative impacts analysis is whether the impacts are “collectively significant.” (*Id.* at 721 [citing CEQA Guidelines, § 15355].)

If a project’s incremental contribution to the impact is “cumulative considerable,” (CEQA Guidelines, § 15130(a)) – i.e., if they are “collectively significant,” (*Kings County Farm Bureau, supra*, 221 Cal.App.3d at 721) – the lead agency must examine reasonable, feasible options for reducing or avoiding the project’s contribution to those significant cumulative effects. (CEQA Guidelines, § 15130(b)(5).)

As explained above, the Regulations will result in numerous reasonably foreseeable environmental effects resulting from road construction and widening projects. But even if BOF could argue these effects did not result from the “project” itself, those effects would result from the reasonably foreseeable future projects the Regulation is seeking to regulate. Because of their statewide focus, the impacts of future projects would plainly be cumulatively considerable, requiring assessment in an environmental document under CEQA.

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### **C. BOF Cannot Reasonably Assert the Regulations are Exempt from CEQA**

#### **1. BOF Cannot Rely Upon Class 7 and Class 8 Categorical Exemptions**

RCRC understands BOF may seek to rely upon a Class 7 or Class 8 exemption in an attempt to avoid environmental review under CEQA. This would be contrary to California law.

First, the Class 7 Exemption for Actions by Regulatory Agencies for Protection of Natural Resources states:

Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption.

(CEQA Guidelines, § 15307.) This provision is inapplicable because the primary objective of the Regulations is not to maintain, restore, or enhance “natural resources.” To the contrary, the primary objective of the Regulations is to promote first responder and civilian safety, neither of which are “natural resources.” And even if BOF could argue the Regulations had some indirect benefits to “natural resources,” the exemption is inapplicable where an action strengthens some protections, but reduces others. (See, e.g., *Save Our Big Trees v. City of Santa Cruz* (2015) 241 Cal.App.4th 694, 710-12; see also *Dunn-Edwards Corp. v. Bay Area Air Quality Mgmt. Dist.* (1992) 9 Cal.App.4th 644, 656-58, *disapproved on other grounds by Western States Petroleum Ass’n v. Superior Court* (1995) 9 Cal.4th 559.) In any event, the Regulations specifically contemplate construction, including the widening of existing roads and driveways, which are “activities . . . not included in this exemption.” (CEQA Guidelines, § 15307.)

CEQA’s Class 8 Exemption [Actions by Regulatory Agencies for Protection of the Environment] is also inapplicable. The Class 8 exemption provides:

Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

(CEQA Guidelines, § 15308.)

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Similar to the Class 7 exemption, the Class 8 exemption is inapplicable because the primary objectives of the Regulations are not related to environmental protection, but rather public safety. As explained above, the Regulations specifically contemplate construction and include standards allowing—and, in fact, promoting—environmental degradation, causing the Regulations to fall entirely outside Section 15308.

Moreover, the mere possibility of environmental benefits does not suffice to preclude review under the “Class 8 Exemption.” (See *Dunn-Edwards, supra*, 9 Cal.App.4th at 656-58 [finding agency could not rely on Class 8 exemption for action tightening standards for volatile organic carbon (VOC) architectural coatings where industry groups provided evidence VOCs would increase due to the need for increased coatings of paint]; see also *Save Our Big Trees, supra*, 241 Cal.App.4th at 710-12 [invalidating ordinance designed to protect heritage trees where aspects of ordinance could result in greater impacts to tree resources].) Rather, a Class 8 exemption is inapplicable where a regulation designed to reduce one environmental effect has the capability of causing other adverse environmental effect. (See, e.g., *Calif. Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist.* (2009) 178 Cal.App.4th 1225, 1246-47 [use of Class 8 exemption for regulation requiring roadway paving to offset air quality emissions was inapplicable because there was no evidence supporting the agency’s claim that no significant adverse impacts associated with road paving would occur].) And, as explained above, the Regulations are plainly capable of causing adverse environmental effects.

As such, the Class 7 and Class 8 exemptions are facially inapplicable.

### **2. Various Exceptions to the Application of Categorical Exemptions Would also Preclude the Use of Class 7 and Class 8 Exemptions Here**

The categorical exemptions are not absolute. Rather, even where an exemption facially applies, there are several exceptions to the applicability of categorical exemptions, (see CEQA Guidelines, § 15300.2), many of which are present here.

***Unusual Circumstances Exception.*** Section 15300.2(c) of the CEQA Guidelines prohibits agencies from relying upon categorical exemptions “where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.” Indeed, courts have repeatedly declined to allow agencies to rely upon categorical exemptions for projects where the evidence shows a ***possibility*** that a potentially significant impact could result. (See *Dunn-Edwards, supra*, 9 Cal.App.4th at 656-58 [finding agency could not rely on Class 8 exemption for action tightening standards for volatile organic carbon (VOC) architectural coatings where industry groups provided evidence VOCs would increase due to the need for increased coatings of paint]; see also *Save Our Big Trees, supra*, 241 Cal.App.4th at 710-12 [invalidating ordinance designed to protect heritage trees where aspects of ordinance could result in greater impacts to tree resources].)

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The Regulations here are unusual in several respects. They contemplate the widening of roadways and driveways beyond that already required, significantly increasing the hardscape in foothill and mountain areas. This is unusual because planning and environmental regulations usually seek to reduce the amount of hardscape in these areas. Also, as explained above, there is plainly a “reasonable possibility of a significant effect on the environment due to” those circumstances, (see *supra*, § III.B), an analysis that is subject to CEQA’s non-deferential “fair argument” test. (*Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1115.). Accordingly, the BOF cannot rely upon a categorical exemption to side-step environmental review under CEQA.

***Historic Resources Exception.*** Section 15300.2 also includes an exception for historical resources: “A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.” (CEQA Guidelines, § 15300.2(f).) As explained above, the roadway widening and construction contemplated under the Regulations have the potential to adversely affect historic and cultural resources. (See *supra*, § III.B.) As such, any categorical exemptions relied upon by BOF would be inapplicable.

***Scenic Highways Exception.*** CEQA also includes an exception to categorical exemptions where a project could adversely affect a scenic highway:

Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

(CEQA Guidelines, § 15300.2(d).) Numerous facilities that are non-conforming under the Regulations intersect scenic highways. The Regulations contemplate those facilities would be significantly widened, which has the potential to “result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources” within the viewshed of various scenic highways. Due to this potential damage, BOF cannot rely upon a Class 7 or Class 8 exemption.

***Cumulative Impacts Exception.*** Categorical exemptions also do not apply “when the cumulative impact of successive projects of the same type in the same place, over time is significant.” (CEQA Guidelines, § 15300.2(b).) As explained above, the Regulations will have cumulatively considerable impacts as a result of the roadways and driveways that will ultimately be required to be widened. (See *supra*, § III.B.) BOF thus cannot rely upon the Class 7 or Class 8 categorical exemptions.

In sum, BOF may not rely upon a Class 7 or Class 8 exemption to avoid a full assessment of the environmental effects of the Regulations.

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**3. BOF also Cannot Rely Upon the Common Sense Exemption**

BOF may also attempt to rely upon the so-called “common sense” exemption to avoid environmental review. (CEQA Guidelines, § 15061(b)(3).) There is not a good faith basis to rely upon the common sense exemption, which only applies to “obviously exempt” projects where “it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.” (*Id.*; see also *Myers v. Board of Supers.* (1976) 58 Cal.App.3d 413, 425.) As explained above, however, by expanding hardscape in foothill and mountain areas, and expanding the width of existing roadways, the Regulation would have a significant effect on the environment. (See *supra*, § III.B.) As a result BOF, cannot rely upon the common sense exemption to avoid environmental review under CEQA.

**IV.**

**THE REGULATIONS WOULD RESULT IN UNCONSTITUTIONAL EXACTIONS IN MANY CASES**

Conditions imposed on agency permitting must have an “essential nexus” to the purpose of the permitting requirement. (*Nollan v. California Coastal Com’n* (1987) 483 U.S. 825, 837.) Such conditions must also be “roughly proportional” to the impact of the proposed development in order to avoid violating the Constitution. (*Dolan v. City of Tigard* (1994) 512 U.S. 374, 391.) The *Nollan-Dolan* standard was born of the “concern that government not convert a valid regulation of land use into an out-and-out plan of extortion.” (*Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854, 899.)

In a recent decision, the Third District Court of Appeals held that El Dorado County’s “Measure E,” requiring road improvements as a condition of development, violated the Takings Clause of the Constitution under the *Nollan-Dolan* test. (*Alliance for Responsible Planning v. Taylor* (“ARP”) (2021) 63 Cal.App.5th 1072 [278 Cal.Rptr.3d 376, 385].) In *ARP*, the Court noted that, “[u]nder *Nollan* and *Dolan* the government may choose whether and how a permit applicant is required to mitigate the impacts of a proposed development, but it may not leverage its legitimate interest in mitigation to pursue governmental ends that lack an essential nexus and rough proportionality to those impacts.” (*Id.*, at 386 [quoting *Koontz v. St. John’s River Water Management Dist.* (2013) 570 U.S. 595, 606].)

Measure E sought to mitigate traffic impacts of new projects, but the Court found that “there are outer limits to how this may be done.” (*Id.* [quoting *Dolan, supra*, 512 U.S. 374, at 391].) Developers building projects subject to Measure E would have been unable to receive any assurances of reimbursement under the law. (*Id.*) This is despite the substantial benefit conferred on other developments by requiring a project proponent to fund road improvements addressing, not only project-specific impacts, but also cumulative and future traffic impacts. (*Id.*)

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The petitioner argued that developers could seek separate agreements with a permitting agency. (*Id.*) But the mere potential that a separate reimbursement agreement was theoretically possible was insufficient to offset this shortcoming. (*Id.*) The Court also rejected the argument that developers can simply wait until either another private party or a public agency completes the improvements. (*Id.*)

Based on the language of Measure E, similar in many respects to Regulations at issue, the Third District concluded that developers would be required to “construct improvements exceeding the extent of the project’s own impact.” (*ARP, supra, 278 Cal.Rptr.3d, at 387.*) This result forced developers to “give up a property interest as a condition of approval” to the extent of an unconstitutional taking. (*Id.*)

As explained in the Poeschel expert report, the Regulations will impose significant costs on residential developments and individual property owners who seek to build residential structures. (See generally Exhibit “B.”) These costs are potential so great that they could eclipse the cost of the improved properties under baseline conditions.

In the event a developer or property owner has the capability of widening an existing road, the improvements performed by the developer or property owner will in most instances benefit other property owners. As a result, the burden of roadway widening and construction will disproportionately fall upon the *first* developer or property owner in an area to seek entitlements or permits, without a reimbursement mechanism or other funding source. This will cause an inequitable situation, where persons who seek to develop residential uses in SRA and VHFHSZs will be required to “construct improvements exceeding the extent of the project’s own impact.” (*ARP, supra, 278 Cal.Rptr.3d, at 387.*) As a result, the Regulations may not survive even a facial challenge under the *Nollan-Dolan* standard, and would almost inevitably result in regulatory takings as applied to many individual developments—for which the Board (and the State) will bear financial responsibility.

**V.**

**THE REGULATIONS WOULD FRUSTRATE RECENT STATE ENACTMENTS  
DESIGNED TO PROMOTE HOUSING AVAILABILITY AND AFFORDABILITY**

Because the Regulations would have the effect of impeding residential development, they will also have the secondary consequence of impairing rural counties’ ability to comply with state housing mandates. California remains in a prolonged and deepening housing availability and affordability crisis. In 2020 alone, Governor Gavin Newsom signed fifteen bills into law meant to ease impediments to building and purchasing housing.

Governor Newsom has committed to building 3.5 million housing units by 2025, six-times greater than the rate of construction *before* the pandemic. To accomplish this, California has endeavored to facilitate residential development, yet the Regulations have exactly the opposite

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effect. Placing a new obstacle in the path to housing availability and affordability will only move California's objectives further out of reach.

The Regulations have the potential to affect everything from funding availability to the implementation of recent legislative enactments. For instance, each local jurisdiction is required to have a housing element within that jurisdiction's general plan. In many cases, State and/or Federal funding for housing development is *only* available if that jurisdiction has a compliant housing element. In other cases, preference is given to applicants in compliant jurisdictions. Section 65583 of the Government Code requires, *inter alia*, an inventory of suitable sites and an analysis of actual and potential constraints on construction, including due to increased cost. (Govt. Code § 65583, subs. (a)(3), (a)(6).) The Regulations will change localities' analysis of suitable sites and construction constraints, frustrating the objectives of their housing elements. Rural counties would be disproportionately impacted due to the time and cost of amending their housing elements, and developers in these areas may lose funding opportunities as a result.

Further, the Regulations would hinder the efforts of local jurisdictions to comply with already-existing housing law. The Housing Accountability Act prohibits conditioning approval of a housing development for very low-, low-, or moderate-income housing in a manner that renders development infeasible. (Govt. Code § 65589.5.) Requiring extensive upgrades to existing roads will render development in rural areas, in many cases, infeasible, directly contradicting the express intent of the Legislature to facilitate the approval of additional housing.

The Regulations also directly impede the implementation and function of SB-35, meant to streamline residential development. SB-35 requires jurisdictions to implement simplified permitting procedures if the jurisdiction fails to meet inventory production levels in the Department of Housing and Community Development's Regional Housing Needs Assessment ("RHNA") for that region. The purpose of SB-35 is to remove the barriers to construction in these areas, but the Regulations counteract the streamlined approvals by adding conditions to an otherwise ministerial process. As of July 2020, only thirty of the *hundreds* of local jurisdictions in California have met their RHNA goals. As such, the Regulations have the potential to effectively roll back nearly all of SB-35's streamlining by requiring local jurisdictions to condition development on performance of costly infrastructure upgrades, reaching far beyond the impacts of the individual project.

## **VI.**

### **CONCLUSION**

BOF should not adopt the Regulations currently drafted. Rather, BOF should instead adopt the County Alternative and/or continue to work with affected stakeholders to ensure the Regulations will not adversely affect private individuals and small businesses or cause significant adverse environmental effects. BOF also may not consider the Regulations for adoption until BOF has complied with its obligations under CEQA and the APA.

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Thank you for your consideration of these important comments.

Respectfully submitted,



John P. Kinsey

Enclosures

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**ENCLOSURES**

**Exhibit A:** June 21, 2021, Report from David J. Hartesveldt, Live Oak Associates

**Exhibit B:** June 21, 2021, Report from Dirk Poeschel, Land Development Services, Inc.

**Exhibit C:** June 18, 2021, Report from Rick P. Smith, Aaron Realty Group

**Exhibit D:** Board of Forestry and Fire Protection, March 2021 Draft Initial Statement of Reasons

**Exhibit E:** February 24, 2021, Board of Forestry and Fire Protection, Fire Safe Regulations Workshop Presentation

**Exhibit F:** March 3, 2021, Board of Forestry and Fire Protection, Fire Safe Regulations Presentation

# **EXHIBIT “A”**



# LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

June 21, 2021

John Kinsey  
Wanger, Jones, Helsley PC  
265 E. River Park Circle, Suite 310  
Fresno, California 93720

**RE: Analysis of potential effects of proposed State Minimum Fire Safe Regulations, 2021, on sensitive biological resources held in the public trust by state and federal resource agencies.**

Dear Mr. Kinsey:

In accordance with your request, I have reviewed "State Minimum Fire Safe Regulations, 2021" and have summarized in this letter my analysis of the potential effects of the proposed regulations on biological resources held in the public trust by state and federal resource agencies. The proposed regulations relate to development projects within State Responsibility Areas and Very High Fire Hazard Severity Zones that were mapped by Cal Fire in 2007. Broadly speaking the regulations have the objective of improving public safety in those areas. Proposed standards in the 2021 regulations would affect emergency ingress and egress, signing and building numbering, private water supply reserves for emergency fire use, vegetation modification, fuel breaks, greenbelts, and the preservation of undeveloped ridgelines. Implementation of some of the proposed regulations as they apply to state and local projects will potentially result in adverse impact to public trust resources such as sensitive natural biological habitats and the native plants and animals inhabiting them. In addition, where such is the case, public trust resource agencies may impose costly conditions on projects that could render them infeasible.

Live Oak Associates, Inc. and its staff of biologists have a long history of addressing project impacts to sensitive biological resources within the geographic areas that would be affected by the proposed fire safe regulations. Since 1995 our staff has conducted baseline surveys for public trust resources such as wetlands, endangered species habitats, and the endangered species occupying them. This work has been in compliance with state and federal environmental protection laws requiring that before proposed projects are constructed existing sensitive biological resources be identified within the project footprint. The information generated from pre-construction surveys is then used to develop measures minimizing or eliminating adverse project impacts. In our experience, even relatively small projects involving minor road improvements, culvert repair, above and below ground utility line installation, hazardous waste abatement, etc. commonly impact wetlands, endangered species, nesting birds, and wildlife movement corridors in ways that trigger compliance with state and federal environmental regulations.

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Oakhurst: P.O. Box 2697 • 39930 Sierra Way, Suite B • Oakhurst, CA 93644 • Phone: (559) 642-4880 • Fax: (559) 642-4883

San Jose: 6840 Via Del Oro, Suite 220 • San Jose, CA 95119 • Phone: (408) 224-8300

Truckee: P.O. Box 8810 • Truckee, CA 96161 • Phone: (530) 214-8947

South Lake Tahoe: P.O. Box 7314 • South Lake Tahoe, CA 96158 • Phone: (408) 281-5885

For example, Article 2 of the proposed regulations sets standards for proposed and existing roads. These standards mandate specifications for new roads, including horizontal and vertical curves/curb radii, bridges and elevated structures on roads and driveways, road and driveway grades, road and driveway widths and horizontal clearances, road and driveway vertical clearances, maximum lengths of one-way roads, maximum lengths of dead-end roads, road and driveway turnouts, and road and driveway turnarounds. Road projects by their very nature involve the disturbance of land, some of which may have natural habitat value, and the proposed regulations seek to expand the footprint of such road projects beyond that which is currently required by most counties.

Existing roads must also be brought up to new standards proposed in the 2021 fire safe regulations. Existing roads may require widening, construction of turnouts and turnarounds where turnouts and turnarounds did not previously exist, modification of grades, and modification of secondary routes to meet all the standards proposed for new roads. Disturbance to natural habitats and the sensitive biological resources occurring in them from upgrading existing roads to meet the new standards may not be avoidable, thus necessitating (potentially) state and/or federal permits conditioned upon the project proponent providing some type of compensatory mitigation. Even those permits necessary for relatively minor impacts to protected natural resources can take months and sometime years to obtain, thus making compliance with the 2021 fire safe regulations both time consuming and expensive.

So far, I have referenced “Public Trust Biological Resources” very generally as applying to natural habitats and the plant and animal species occurring in them. To better understand the possible scope of impact to these resources from project compliance with the proposed 2021 fire safe regulations it would be useful to identify in more detail some of those resources occurring within State Responsibility Areas and Very High Fire Hazard Severity Zones.

### **Threatened, Endangered and Fully Protected Species**

California has been blessed with an enormous diversity of native plant and animal species. However, many native plant and animal species are threatened with extirpation due to habitat loss. Maintenance of biological diversity has been determined to be in the public interest. Therefore, in California, imperiled plants and animals may be afforded special legal protections under the California Endangered Species Act (CESA) and/or Federal Endangered Species Act (FESA). Species may be listed as “threatened” or “endangered” under one or both Acts, and/or as “rare” under CESA. Under both Acts, “endangered” means a species is in danger of extinction throughout all or a significant portion of its range, and “threatened” means a species is likely to become endangered within the foreseeable future. Under CESA, “rare” means a species may become endangered if their present environment worsens. Both Acts prohibit “take” of listed species, defined under CESA as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 2086), and more broadly defined under FESA to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3).

The classification of certain animal species as “fully protected” was the State of California’s initial effort in the 1960s, prior to the passage of the California Endangered Species Act, to identify and provide additional protection to those species that were rare or faced possible extinction. Following CESA enactment in 1970, many fully protected species were also listed as California threatened or endangered. The list of fully protected species are identified, and their protections stipulated, in California Fish and Game Code Sections 3511 (birds), 4700

(mammals), 5050 (reptiles and amphibians), and fish (5515). Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except in conjunction with necessary scientific research and protection of livestock.

Compliance with the proposed 2021 fire safe regulations could result in broad effects on native plant and animal species. I provide below examples of listed native animals occurring in State Responsibility Areas that would potentially be affected by project compliance with the proposed fire safe regulations.

- *Valley Elderberry Longhorn Beetle (VELB)*. The valley elderberry long-horn beetle (*Desmocerus californicus dimorpha*), is a federally threatened species occurring in valley and foothill habitats from the northern San Joaquin Valley to the northern Sacramento Valley. The blue elder (*Sambucus cerulea*), the obligate host of the VELB, is a common component of valley and foothill vegetation. It frequently occurs on road shoulders, adjacent to parking areas, and within open areas of residential and commercial developments of Sierra foothill towns. The USFWS has determined that disturbance to areas within 100 feet of a mature elderberry bush will potentially result in VELB mortality. In such cases, it may not be possible to design road improvement projects to avoid take. Compliance with FESA may require take authorization issued by the USFWS, a potentially expensive and time-consuming endeavor that could threaten the viability of some projects.
- *California Tiger Salamander (CTS)*. The California tiger salamander (*Ambystoma californiense*) is a state and federally threatened amphibian that breeds in vernal pools of the San Joaquin Valley and the coast ranges of central California. This species oversummers in rodent burrows up to 1.3 miles away from the vernal pools it breeds in. Any ground disturbance within 1.3 miles of known breeding pools could result in the take of CTS seeking cover in a rodent burrow. Road improvement projects within known CTS habitat that involves widening, the grading of road shoulders, the construction of turnouts, and the reduction of grades to less than 25% are all activities potentially resulting in disturbance to vernal pool breeding habitat and rodent burrows potentially harboring individual CTS. Where such is the case, compliance with FESA and CESA would likely require take authorization from both the USFWS and CDFW, which could be a significant added cost of development.
- *Vernal Pool Fairy Shrimp*. The vernal pool fairy shrimp (*Branchinecta lynchi*), a federally threatened crustacean, spends entire life cycle in vernal pools of California's Central Valley and low Sierra foothills. New road projects and road improvement projects for existing roads will potentially encroach on vernal pool habitats occupied by vernal pool fairy shrimp. In addition to these negative effects, any ground disturbance in vernal pool habitats of California's Central Valley and Sierra foothills require consultation and take authorization issued by the USFWS, which is a potentially expensive and time-consuming endeavor.
- *Southern Sierra Distinct Population Segment of Fisher*. The southern Sierra Nevada (SSN) population of fishers (*Pekania pennanti*) is a state threatened and federally endangered member of the weasel family occurring from the Sierra Nevada from the Merced River on the north to Tulare County on the south. Improvement projects for existing roads as mandated by the proposed fire safe regulations may result in the

destruction of denning habitat, which would be construed as take. Applicants could potentially seek take authorization from the USFWS and CDFW; however, this is usually an expensive and time-consuming endeavor that could threaten the viability of some projects, and would still result in impacts to species.

- *California Red-legged Frog (CRLF)*. The California red-legged frog (*Rana draytonii*) is a federally threatened species occurring at mid-elevations in the northern Sierra and in scattered locations throughout the California coastal ranges. CRLF breeds within pools of slow-moving streams, and perennial or ephemeral ponds, and can be found within 1-2 miles of these areas in upland sheltering habitat such as rocks, small mammal burrows, logs, densely vegetated areas, and even man-made structures (i.e. culverts, livestock troughs, etc.). During the summer they may be up to 100 feet away from water. Road construction activities within, or adjacent to, breeding habitat and within 1-2 miles of breeding habitat may impact this species, depending on the time of year. Construction activities within and adjacent to known frog habitat will adversely affect the CRLF, and require consultation the USFWS, and possibly take authorization in the form of a permit.
- *Blunt-nosed Leopard Lizard (BNLP)*. The blunt-nosed leopard lizard (*Gambelia sila*) is a state and federally endangered and fully protected species occurring on the west side of the San Joaquin Valley and the eastern foothills of the Inner Coast Ranges. Habitat consists of open areas of non-native grassland and alkali sink scrub. Road improvement projects within the range and habitats of the BNLP would potentially result in mortality of individuals, however, as a fully protected species, the CDFW cannot issue a take permit for possible take. Projects cannot be lawfully implemented where the take of this species might occur, which could render some projects infeasible.

The presence of listed species in State Responsibility Areas subject to proposed fire safe regulations ensures that some road improvement and fuel break projects would likely result in impact to the aforementioned species, as well as several others not included in the above list. Where existing roads must be widened, turning radii modified, turnouts and turnarounds constructed, FESA and CESA compliance could require field surveys at appropriate times of the year, impact analysis, and the implementation of mitigation measures designed to avoid take. Meeting the requirements of FESA and CESA, even for small road improvement projects resulting in minor impact to listed species, often involves considerable cost and significant delays (months and in some cases years) in project construction. These costs and delays could ultimately render some projects financial infeasible.

### **Migratory and Nesting Birds**

Any road improvement and fuel break projects subject to the proposed fire safe regulations will result in the mortality of nesting birds, should those projects be constructed during the bird nesting season (February 1 through August 31). Habitats in which birds nest include grasslands, shrub lands, and forest and woodlands. Therefore, there is no project that could be constructed during the nesting season where fire safe regulations would not potentially result in avian mortality.

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the

Secretary of the Interior. The name of the act is misleading, as it actually covers almost all birds native to the United States, even those that are non-migratory. The FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Native birds are also protected under California state law. The California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities. Moreover, the California Migratory Bird Protection Act, enacted in September 2019, clarifies native bird protection and increases protections where California law previously deferred to federal law.

In California, protection is also afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is “unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of “take” by the CDFW.

Compliance with the proposed fire safe regulations may involve the removal of substantial areas of vegetation to meet the vertical and horizontal clearance specifications for ingress and egress, or to create required fuel breaks. However, compliance with federal and state laws protecting birds would require either that road improvement projects occur outside the bird nesting season (February 1 through August 31), or that pre-construction nest surveys be conducted and active nests identified in such surveys be avoided by the establishment of appropriate no-disturbance buffers. Such buffers must remain in effect until all young birds have fledged.

### **Birds of Prey**

Compliance with the proposed fire safe regulations will, during the nesting season, result in potential impact to birds of prey (i.e., raptors), a special category of birds afforded special protection from project disturbance. Some raptors (i.e., birds of prey) are particularly sensitive to nearby disturbance from construction equipment or disturbance resulting from vegetation removal. Such disturbance has been known to result in nest abandonment and the mortality of juveniles that have not yet fledged.

Birds of prey are protected in California under provisions of the Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

Improvements to existing roads as required by the proposed fire safe regulations could result in the abandonment of nearby raptor nests, and the mortality of juveniles in the nest. Compliance with state law protecting birds of prey would either require all road improvement projects to occur outside the raptor nesting season (February 1 through August 31), or pre-construction surveys for active raptor nests, and the establishment of appropriate no-disturbance buffers around active nests that could otherwise be adversely affected by the project. Such buffers must remain in effect until all young birds have fledged.

## Wetlands and Other Jurisdictional Waters

Road improvements designed to bring existing roads up to the standards of the proposed fire safe regulations have the potential to disturb hydrologic features such as creeks and wetlands providing functions and values important to the larger public interest. These functions and values may include (1) maintenance of water quality; (2) flood abatement; (3) recharge and storage of groundwater; (4) fish and wildlife habitat; (5) recreational opportunities; (6) aesthetic amenities; and (7) carbon sinks. LOA staff has extensive experience working with projects to remediate the damage inflicted on streams and wetlands. The loss of water quality and habitat value is sometimes significant, even when the areal extent of impact is not great.

The United States Army Corps of Engineers (USACE) regulates the filling or grading of waters of the U.S. under the authority of Section 404 of the Clean Water Act (CWA). Drainage channels (rivers and their tributaries) and adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the USACE.

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the Department of the Army (DA) permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of aquatic and wetland functions and values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board has regulatory authority to protect the water quality of all surface water and groundwater in the State of California (“Waters of the State”). Nine RWQCBs oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders. Discharges into waters of the State that are also waters of the U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all Waters of the State, even those that are not also waters of the U.S., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a water of the U.S. may require a NPDES permit.

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be

prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.

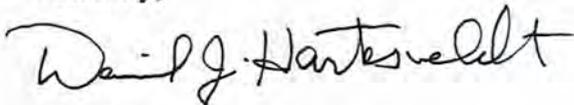
Compliance with state and federal laws regulating disturbance to jurisdictional waters may also trigger required compliance with other state and federal laws. For example, compliance with Section 1602 of California Fish and Game Code (notifying CDFW of disturbance to streams) will trigger the need for CEQA compliance should a Streambed Alteration Agreement be required. Compliance with Section 404 of the Clean Water Act may trigger a consultation with the USFWS per Section 7 of FESA, if the project may adversely affect a federally listed species. The consultation with the USFWS will lead to a determination as to whether take will occur and, if so, what conditions will be imposed on the project to eliminate the likelihood of take.

Accordingly, prior to the initiation of any road improvement project, the footprint of project disturbance must be surveyed for drainage channels and wetlands, any drainages or wetlands observed during the survey must be mapped, the extent and type of project disturbance must be determined, appropriate permits must be obtained, and the conditions of the permits (such as mitigation measures reducing or compensating for project impacts) must be met. Compliance with federal and state laws protecting natural drainages and wetlands involves costs in the delineation of jurisdictional waters within the project footprint, preparation and submittal of permit applications to the various agencies, and implementation of mitigation measures.

## **Conclusion**

The proposed "State Minimum Fire Safe Regulations, 2021" provide very specific standards for projects within State Responsibility Areas and within Very High Fire Hazard Severity Zones. These standards as they apply to existing roads will no doubt require that such roads be upgraded to meet the standards. The standards for ingress and egress and the clearing of fuel breaks have the potential to affect sensitive natural habitats within the jurisdictions of various state and federal trustee agencies having permit authority over projects within those jurisdictions. Potential project impacts to public trust natural resources, as discussed in this letter, will in some cases, have significant fiscal effects related to pre-construction surveys, permitting preparation and fees, and the implementation of mitigation measures that will eliminate or minimize impacts to those resources. Compliance with state and federal environmental regulations could also impose on projects upgrading ingress and egress or clearing fuel breaks unanticipated delays in securing approvals from state and federal resource agencies. The proposed fire safe regulations do not address these issues, nor acknowledge the fiscal burden imposed on public and private sector entities obligated to comply with the proposed regulations.

Sincerely,



David J. Hartesveldt  
Senior Biologist, Live Oak Associates, Inc.

# **EXHIBIT “B”**

June 22, 2021

John Kinsey, Esq.  
WANGER JONES HELSLEY PC  
265 E. River Park Circle  
Suite 310  
Fresno, California  
93720

SUBJECT: Proposed State Minimum Fire Safety Regulations, 2021

Dear Mr. Kinsey:

Reference is made to your assignment of my firm to provide an assessment of the California Board of Forestry's ("BOF") proposed State Minimum Fire Safety Regulations (the "Regulations") and the potential effects of the proposed Regulations from a planning and development perspective. This letter focuses primarily on the Regulation's requirements for New and Existing Roads and Driveways.

For over three decades, I have provided planning and development consulting services for a wide range of residential, commercial and industrial projects in Central California, including numerous mountain and foothill subdivisions and parcel maps. I have also prepared and processed for approval fire protection plans with various fire protection agencies such as Cal Fire and the California Department Forestry and understand how those plans and regulations affect development within our foothill and mountain communities.

Based on this experience, I recognize the need for practical regulations promoting the safety of the citizens who live and work in our foothill and mountain communities, as well as the first responders who are charged with combating wildfires. While I appreciate the BOF's objective in promoting safety, I have significant concerns regarding the aspects of the Regulation that require costly and unnecessary upgrades to existing roads and driveways, and the standards to which new roadways and driveways must be built. These standards will dramatically hinder residential and economic development in rural California and should be modified significantly prior to consideration for adoption. Also, this additional regulatory directive places another burden on rural counties that have been financially stressed by common under funding of state subventions for roadways and other mandated requirements.

### **Roadway Development**

Roadway development in foothill and mountain areas is substantially different and more physically difficult than developing roadways in a valley or urban areas, and far more costly.

Soil types are typically rock based versus a sand clay composition typically found in the California valleys. This rock composition is typically substantially more expensive to develop roadways over or through as the equipment necessary to cut through the rock base is expensive and is subject to much faster wear and tear than roadway construction equipment used in a valley geology. The rock geology also limits the alternative routes in which roadways may be developed as engineers attempt to select the least expensive route over which to build a roadway.

A variation also exists between counties in or near SRA as some counties have sporadic areas of development while other counties growth development patterns are more urbanized in character. Historic windage patterns, fire events, topography and similar characteristics all effect fire safety. A county-by-county approval would allow a more specialized and precise approach to fire protection than mandating one set of fire protection alternatives for all counties.

According to the American Road and Transportation Builders Association, the realities of road building have much to do with a number of variables: location, terrain, type of construction, number of lanes, lane width, surface durability, and the number of bridges, to name a few.

As a result, the initial cost of construction for new roadways in foothill and mountain communities is estimated to be \$1.2 million to \$2.0 million for a 20-foot-wide facility,<sup>1</sup> which is far greater than the cost of construction in flat rural areas. And the increased cost does not end there. After construction, most roadways in California have a 1-year warranty period. After expiration of the warranty period, public roadways are annexed into the host municipality's-maintained road system where the burden of maintenance now becomes a financial hardship.

Colder weather, snow, rain, storm water drainage, biological influences and geologic movement are common contributing factors to substantially increased costs of road maintenance for mountainous roads. These factors vary by California county, therefore, expanding the width of mountainous roads has a substantial cost increase multiplier effect placing an additional burden on the host government.

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<sup>1</sup> Publicly available materials from other jurisdictions with fewer restrictions than California suggest \$1.2–\$2.0 million/mile may understate the cost of roadway/driveway development:

<https://www.fdot.gov/programmanagement/estimates/lre/costpermilemodels/cpmssummary.shtm> [\$2.55 million per mile in Florida (2020)]

<https://web.archive.org/web/20170318155340/https://www.modot.org/whatsitcost/> [\$1.8 million per mile in Missouri in 2013]

[https://web.archive.org/web/20111013092241/http://www.arkansashighways.com/roadway\\_design\\_division/Cost%20per%20Mile%20JULY%202011.pdf](https://web.archive.org/web/20111013092241/http://www.arkansashighways.com/roadway_design_division/Cost%20per%20Mile%20JULY%202011.pdf) [\$1.9 million per mile in Arkansas in 2011]

**The Regulations Will Render Residential Development, Including Affordable Housing, Significantly More Difficult in Foothill and Mountain Communities**

California is currently in the midst of a housing affordability and availability crisis. Although the crisis is often portrayed by the media through an urban lens, rural foothill and mountain communities suffer from the same issues. Indeed, due to stagnate wages, the increased cost of housing, and the lack of a sufficient housing inventory (and in particular low-income housing), the housing crisis has hit rural communities particularly hard.

Although the state has attempted to enact legislation and regulations promoting the development of residential units, to date those efforts have proven insufficient to slow the gap between wages and housing costs. This is due to numerous factors, including rising materials costs, rising labor costs (including the unavailability or limited availability of skilled labor), project opposition from local and environmental stakeholders, and what can often be expensive and time-consuming environmental review under the California Environmental Quality Act (“CEQA”).

The Regulations will only make these trends worse by both hindering the development of new inventory and increasing the costs of housing. Most new residential development in foothill and mountain communities occurs in the form of small to modestly sized subdivisions or the development of single residential units on large lots. The profit margins for these smaller developments are much lower than large master-planned communities or even small subdivisions in urban areas. In many circumstances, the addition of even a small increase in capital improvement costs such as roadway/driveway construction can render a small project infeasible. And for those developers who have the capital or financing to absorb those costs prior to the sale of finished lots, the increased costs are ultimately passed-on to the homebuyers.

The Regulations contemplate those new roads and driveways would be at least 20 feet in width, and that existing roads and driveways must be widened to at least 14 feet. These standards will significantly increase the cost of foothill and mountain development, and in many cases render development financial infeasible.

Foothill and mountain subdivisions are typically characterized by a cluster of homesites sharing internal roadways and driveways, with two or more points of access to the nearest public road. For even a modestly sized subdivision, it is common to construct several miles of internal and access roadways and driveways.

For a modest 10-unit subdivision, a reasonable estimate for the length of internal and external roadways and driveways would be two miles. Based on a per mile cost of \$1.2 million to \$2.0 million for new 20-foot roadways and driveways, the Regulation would result in a subdivider being required to spend between \$2.4 million and \$4.0 million for roadways and driveways alone, at a cost of between \$240,000 and \$400,000 per unit for a 10-unit subdivision. Making

matters worse, roadway improvements must be constructed before any lots are sold. These up-front costs would render most foothill and mountain develops infeasible.

In addition, the roadway improvement costs would be in addition to construction costs (which are usually between \$150 to \$300/square foot), land acquisition costs, and soft costs (such as engineering, permitting and CEQA compliance). All together, these costs could push the actual cost of development for even a modestly sized residential home to nearly \$1,000,000/unit. As a result, even if a developer were willing to take the risk of paying \$2.4 to \$4.0 million up front in roadway improvement costs for a 10-unit development—which is highly unlikely the developer would need to sell the homes for well over \$1,000,000/unit, which is not a realistic asking price for most foothill and mountain communities, except for lakeside lots or upscale resort communities.

Based on the foregoing, and my 32-years of experience in seeking development entitlements for rural subdivisions, it is my professional opinion that the Regulations would preclude most new residential subdivisions in foothill and mountain communities in Central California.

#### **The Regulation Will Inhibit Development Adjacent to Existing Non-Conforming Roadways**

It is my understanding that BOF has not undertaken an inventory or assessment of the number of non-compliant roadways and driveways in SRA's and VFHFSZ's that would be affected by the Regulations. Before considering the Regulations for adoption, BOF should perform an inventory of the roadways and driveways affected to assess the full economic and environmental impact of the Regulations.

In most of the counties affected by the Regulations, there are hundreds of miles of roadways and driveways that currently do not meet the proposed 14-foot and improvement standards. For example, Madera County alone has 238.36 miles of gravel roads in VFHFSZ's and 196.83 miles in SRA's. Madera County likewise has 189.79 miles of roads under 14 feet in width in VFHFSZ's and 167.32 miles in SRA's. (Communication from Madera County Staff, June 11, 2021.) Similarly, in Nevada County, approximated 42% of vacant parcels (4,975 parcels total) would be impacted by the Regulations. (See **Exhibit "A."**) And Monterey County has well-over 100 miles of gravel roads that would need to be upgraded. (See **Exhibit "B."**)

I also understand that any person who seeks to build a new home adjacent to a non-conforming roadway must improve the non-conforming roadway from the new residential structure all the way to the nearest collector. Many homesites in the foothill and mountain areas of Madera, Fresno, and Tulare Counties rely upon lengthy dirt and gravel driveways for

travel from the nearest paved roadway to the residence. These unpaved driveways are often up to a mile in length or more.<sup>2</sup> This is problematic for several reasons.

First, to expand a roadway, the alignment for the roadway must be of sufficient width to accommodate the expansion. Based on my experience, in many instances the roadway alignments will not be of sufficient width to accommodate the 14-foot width, drainage, and the setbacks required under the Regulation. Because a private person does not have the power of eminent domain, it would be virtually impossible for an individual seeking a building permit under such circumstances to comply with the Regulation.

In addition, the costs of roadway expansion are significant. Even if expansion and repaving costs are only half the cost of new construction—which is very conservative—these requirements could add another \$600,000 to \$1,000,000 to the cost of the development of a *single residential structure* where there is only a mile between the proposed residential structure and the nearest collector.<sup>3</sup> These roadway costs alone are sufficient to render the construction of most residences infeasible.

Thus, in addition to halting the development of new residential subdivisions, the Regulations will also essentially preclude the residential construction on most parcels within foothill and mountain communities.

**BOF’s Conclusion that Implementation Costs Will Fall on Local Jurisdictions is Inaccurate**

In the Initial Statement of Reasons, BOF staff states that “[i]mplementation costs [of the Regulations] are likely to fall on local jurisdictions and not onto private individuals and businesses.” (ISOR at 45-46.) This statement is inaccurate. Specifically, in my 32-years of development experience, the burden of constructing new facilities or facility improvements to accommodate new development has *always* fallen on the developer as a condition of approval. These exactions are commonplace in the development process and are a feature of virtually every project approval where facility improvements are required. Indeed, most local governments would take the position that they could not legally fund roadway improvements for the benefit of individual development projects, as that would constitute a gift of public funds.

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<sup>2</sup> In most counties, persons who seek to construct such driveways are required to obtain certification from their project engineer that the driveways/private roadways are “all-weather” roads and are capable of accommodating emergency vehicles in all-weather conditions. As a result, the proposed prescriptive standards in the Regulations are unnecessary.

<sup>3</sup> Of course, most undeveloped lots in rural counties are located far more than one mile from the nearest collector.

**The BOF Should Consider the Secondary Indirect Effects of the Regulation on Local Businesses**

The ISOR asserts that the Regulation would not have any effects on businesses within the state of California, or the creation/elimination of jobs. (ISOR at 45-46.) This is inaccurate. Businesses in foothill and mountain communities rely upon employees who live in those communities or nearby, and local residents to patronize their businesses. As discussed above, however, the Regulations will result in most new residential development in foothill and mountain communities coming to a halt, with the potential exception of luxury and vacation communities. In other words, the Regulations have the potential to reduce the pool of potential employees and at the same time limit the economic opportunities for those businesses.

**Because California Counties Are Diverse, the BOF Should Not Adopt a “One Size Fits All” Approach to Fire Safety**

California counties and cities differ in their vision of what growth should look like in their jurisdictions. Some counties desire more urbanization while other counties seek to maintain their rural character while accommodating growth.

According to the California Policy Center, California’s *Transportation Future, the common road* published in July 2018 authored by Edward Ring “California has nearly 18 million people residing in greater Los Angeles and over 7 million people residing in the greater San Francisco Bay Area. Residents of the San Diego region and Sacramento regions account for 32 million of California’s 309 million population. Yet *all* of California’s urban areas, the most densely urbanized in the nation, only constitute *five percent* of its 163,696 square miles.”

Of the state’s 39 million people, small rural counties have more than 4.3 million residents and comprise approximately 56% of the state’s landmass. The geography of the 37-member Rural County Representatives of California ranges from forested mountainous landscape to coastal areas. More than 75% of U.S. Forest Service land in the state is within the rural counties, which provide statewide residents and visitors with some of the world’s most scenic and breathtaking recreational opportunities.

The term "rural" may be defined in various ways: population density, population size, demographics, or economic data. Rural counties face unique challenges when putting federal and state fire protection policies into effect. The greater distances, lower population densities, and geographic diversity of rural counties result in those counties facing face obstacles not experienced by their more urban or suburban counties.

Rural counties have limited financial resources to implement many of the proposed rule changes and fear developers and/or property owners that provide growth to the rural communities can simply not afford to implement many of the proposed rules. The consequence of the Regulation being no or little growth and lack of tourism that funds a large

portion of these rural county budgets. For those reasons, "one-size-fits-all" policies particularly in fire protection does not work, especially when the "size" typically is a more metropolitan county model.

### **Environmental Consequences**

Most mountainous roadways are proximate to environmentally sensitive areas such as streams, wetlands, forests, and wildlife migration areas. Most travelers to mountain areas do so to enjoy the natural scenery of mountainous areas. Often mountain roadways are considered *scenic* even though they are not formally designated so in the host community's general plan. Enlarging the footprint of a mountain road can therefore have adverse consequences to an area's visual quality.

Enlarging the width of a roadway could also require environmental mitigation that is multiple times more expensive than avoidance. So, for a variety of environmental protection and cost saving reasons, the footprint of a mountain roadway and its corresponding loss of environmental resources should be kept as small as functionally possible.

Time delays to obtain a Federal 404 permits and other regulatory clearances will stall mountain roadways width widening and similar construction activities causing further cost increases. Therefore, expanding the width of mountainous roads will cause environmental consequences that can substantially increase project costs far past anticipated benefits.

### **Conclusion**

While BOF's objective of promoting public safety is laudable, the Regulations impose unnecessary financial burdens on residential development. In my professional opinion, by dramatically increasing the costs of up-front development costs, the Regulations would essentially halt new residential development in foothill and mountain communities, including both new single-family units and larger subdivisions.

Thank you for your consideration of these comments. If you have any questions, please feel free to contact me.

Sincerely,



Dirk Poeschel, AICP.

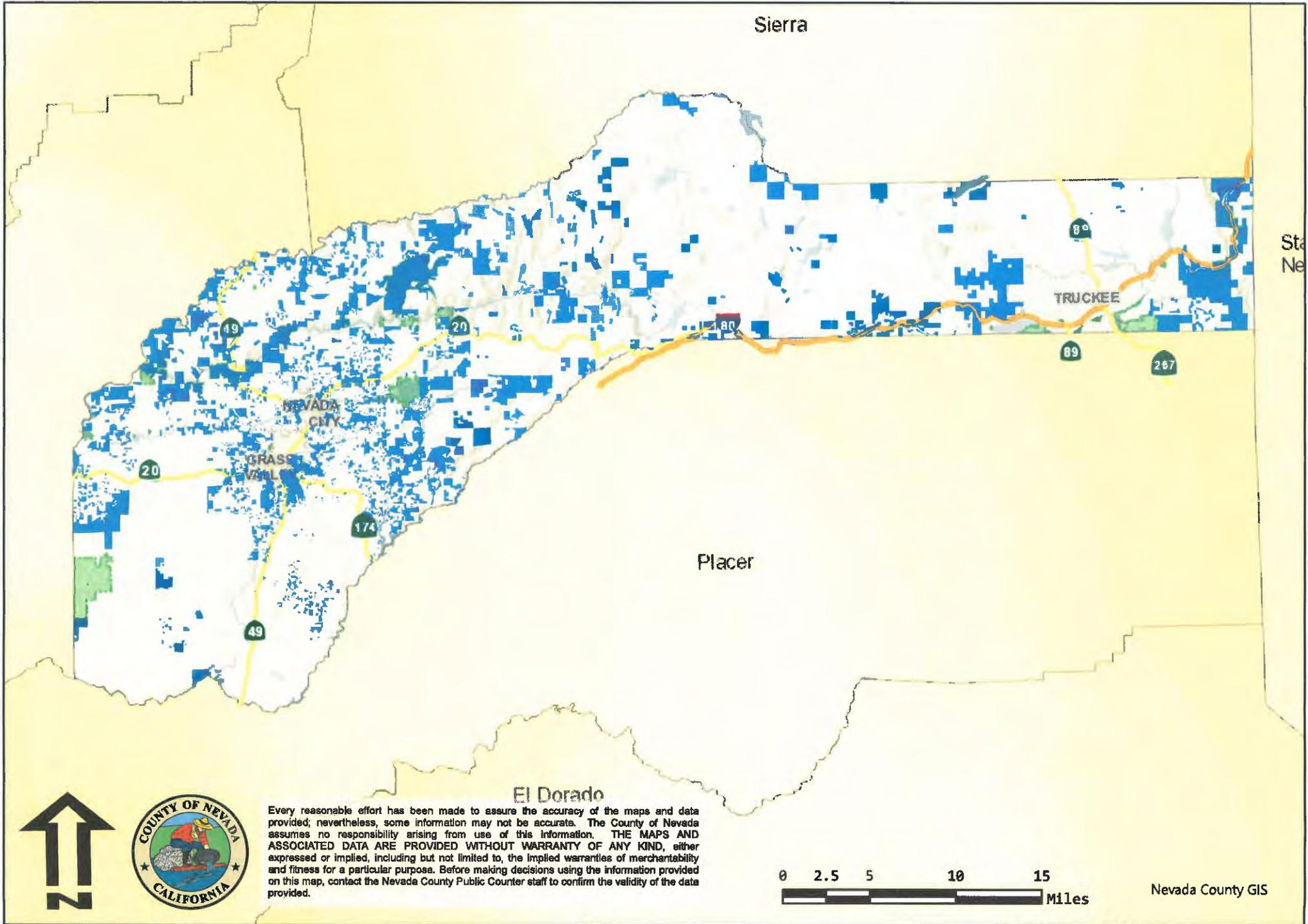
Attachments

Sources:

1. Protect Your Property from Wildfire, Insurance Institute for Business and Home safety, California Edition, undated.
2. Protecting Residences from Wildfires: a guide for homeowners, lawmakers, and planners, Howard E. Moore, Unites States Department of Agriculture, May 1981.
3. Analysis: Safety rules give homes better chance in wildfires, AP News, Dale Kasler and Phillip Reese, April 11, 2019.

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# Vacant Parcels within the Very High Fire Hazard Severity Zone in State Responsibility Area





**Monterey County**  
Section Description Inventory - Sorted by PCI

Road ID	Section ID	Road Name	Begin Location	End Location	# of Lanes	FC	Length (ft)	Width (ft)	Area (sf)	ST	PCI Date	PCI
MOSSRD	0010	MOSS LANDING RD	POTRERO RD	ALLEN ST	2	L	484	33	15,972	A	9/21/2018	14
PHLWY	0010	PHELPS WY	CARMEL VALLEY RD	NORTH END	2	L	300	25	7,500	A	9/21/2018	14
SARGRD	0050	SARGENTS RD	30077FT SOUTH OF SARGENT CREEK	SOUTH END	2	L	6,031	11	66,341	A	9/21/2018	14
TEREST	0010	TERESA ST	MAIN ST	SAN BENITO ST	2	L	326	20	6,520	A	9/21/2018	14
ARRORD	0250	ARROYO SECO RD	PARAISO SPRINGS RD	FORT ROMIE RD	2	MaC	609	22	13,398	A	9/21/2018	13
CANAST	0010	CANAL ST	CATTLEMEN RD	ANNETTE ST	2	L	656	34	22,304	A	9/21/2018	13
DOLARD	0030	DOLAN RD	VIA TANQUES	TRAIL DR	2	MiC	5,740	36	206,640	A	9/21/2018	13
HEBERD	0010	HEBERT RD	OLD STAGE RD	MIDDLEFIELD RD	2	MaC	1,823	23	41,929	A	9/21/2018	13
HUNTLN	0020	HUNTER LN	04094FT EAST OF HWY 68	HARKINS RD	2	L	4,094	20	81,880	A	9/21/2018	13
KELTDR	0020	KELTON DR	CORNWALL ST	ROGGE RD	2	L	589	36	21,204	A	9/21/2018	13
MARADR	0010	MARAVILLA DR	WEST END	LAURELES GRADE	2	L	1,851	22	40,722	A	9/21/2018	13
SALIST	0070	SALINAS ST	END BRIDGE	MERRITT ST	2	L	732	70	51,240	C	9/21/2018	13
ELCAAL	0010	EL CAMINO REAL	GREENFIELD CITY LIMIT	SUSAN LN	4	L	971	50	48,550	A	9/21/2018	12
HITCRD	0030	HITCHCOCK RD	DAVIS RD	04527FT NORTH OF DAVIS RD	1	L	4,527	14	63,378	A	9/21/2018	12
SALIST	0020	SALINAS ST	BRADLEY RD	MEADOW AV	2	L	264	23	6,072	A	9/21/2018	12
SANLST	0010	SAN LUCAS ST	MAIN ST	SAN BENITO ST	2	L	328	20	6,560	A	9/21/2018	12
LOWETR	0010	LOWER TRAIL	VALLEY WY	UPPER TRAIL (S)	2	L	144	13	1,872	A	9/21/2018	11
PAYSST	0010	PAYSON ST	GRANT ST	LINCOLN ST	2	L	793	38	30,134	A	9/21/2018	11
VIAPLA	0010	VIA PORTOLA	WEST END	S CARMEL HILLS DR	2	L	165	26	4,290	A	9/21/2018	11
SANTDR	0010	SANTA LUCIA DR	NESTLES RD	NORTH END	2	L	353	20	7,060	A	9/21/2018	10
PURTLN	0010	PURTON LN	CENTER ST	CARMEL VALLEY RD	2	L	134	28	3,752	A	9/21/2018	9
SHORST	0010	SHORT ST	CATTLEMEN RD	EAST END	2	L	381	30	11,430	A	9/21/2018	9
VIDARD	0010	VIDA RD	SOUTH END	HWY 101	2	L	3,451	23	79,373	A	9/21/2018	9
MOSSRD	0030	MOSS LANDING RD	SANDHOLDT RD	HWY 1	2	L	918	23	21,114	A	9/21/2018	8
OLDSRD	0150	OLD STAGE RD	POTTER RD	ENCINAL RD	2	MIC	1,009	25	25,225	A	9/21/2018	8
ALYAAY	0020	ALLEY A	ALBERT ST	ANITA ST	1	L	474	12	5,688	A	9/21/2018	7
BIRCPL	0010	BIRCH PL	RIO RD	EAST END	2	L	431	24	10,344	A	9/21/2018	7
LIVEWY	0010	LIVE OAKS WY	WEST END	PINE CANYON RD	2	L	271	21	5,691	A	9/21/2018	6
VIARRA	0010	VIA RIVIERA	WEST END	S CARMEL HILLS DR	2	L	216	26	5,616	A	9/21/2018	4
ENGIRD	0010	ENGINEER CANYON RD	SOUTH END	RESERVATION RD	2	L	162	20	3,240	A	*No Access	
KIRBRD	0010	KIRBY RD	SOUTH END	ELKHORN RD	2	L	829	21	17,409	A	*No Access	
PALORD	0030	PALO COLORADO RD	07507FT EAST OF GARRAPATOS RD	13164 FT E OF GARRAPATOS RD	1	L	5,783	14	80,962	A	*No Access	
PALORD	0040	PALO COLORADO RD	13164 FT E OF GARRAPATOS RD	18948 FT E OF GARRAPATOS RD	1	L	5,784	14	80,976	A	*No Access	
PALORD	0050	PALO COLORADO RD	18948 FT E OF GARRAPATOS RD	24731FT E OF GARRAPATOS RD	1	L	5,783	14	80,962	A	*No Access	
PALORD	0060	PALO COLORADO RD	24731 FT E OF GARRAPATOS RD	EAST END	1	L	5,782	14	80,948	A	*No Access	
PINERD	0120	PINE CANYON RD	JOLON RD	NORTH END	2	L	1,077	20	21,540	A	*No Access	
SANCRD	0010	SANCHEZ RD	SOUTHWEST END	GATE	2	L	5,031	13	65,403	A	*No Access	
15THST	0010	15TH ST	OAK AV	NORTH END	1	L	1,474	16	23,584	G	-	-
ALYAAY	0010	ALLEY A	SAN LUCAS ST	ALBERT ST	2	L	449	20	8,980	G	-	-
ALYAAY	0030	ALLEY A	ANITA ST	ALLEY D	2	L	267	20	5,340	G	-	-
ALYAAY	0050	ALLEY A	TERESA ST	MARY ST	2	L	918	20	18,360	G	-	-
ALYA1AY	0010	ALLEY A1	MARTIN ST	RAILROAD ST	2	L	519	18	9,342	G	-	-
ALYBAY	0010	ALLEY B	ALLEY A	SAN BENITO ST	2	L	160	20	3,200	G	-	-
ALYB1AY	0010	ALLEY B1	ALLEY C1	GODCHAUX ST	1	L	187	18	3,366	G	-	-

FC (Functional Classification): L (Local), MIA (Minor Arterial), MIC (Minor Collector), MaC (Major Collector), OPA (Other Principal Arterial)  
ST (Surface Type): A (AC), C (Composite), G (Gravel), P (Concrete), ST (Surface Treated)



**Monterey County**  
Section Description Inventory - Sorted by PCI

Road ID	Section ID	Road Name	Begin Location	End Location	# of Lanes	FC	Length (ft)	Width (ft)	Area (sf)	ST	PCI Date	PCI
ALYB1AY	0020	ALLEY B1	GODCHAUX ST	END OF PAVEMENT	2	L	159	18	2,862	G	-	-
ALYC1AY	0010	ALLEY C1	ALLEY B1	MAIN ST	2	L	200	18	3,600	G	-	-
ALYC1AY	0020	ALLEY C1	MAIN ST	RAILROAD ST	1	L	383	18	6,894	G	-	-
ALYEAY	0010	ALLEY E	ALLEY A	SAN BENITO ST	2	L	167	20	3,340	G	-	-
ANITST	0020	ANITA ST	SAN BENITO ST	NORTH END	2	L	289	20	5,780	G	-	-
ARGYRD	0030	ARGYLE RD	END OF PAVEMENT	SOUTH END	2	L	3,350	20	67,000	G	-	-
BRYARD	0060	BRYANT CANYON RD	END OF PAVEMENT	NORTH END	2	L	15,363	12	184,356	G	-	-
ALYC2AY	0010	C2 ALLEY	UNION ST	POOLE ST	2	L	365	18	6,570	G	-	-
ALYC2AY	0020	C2 ALLEY	POOLE ST	RICO ST	2	L	363	18	6,534	G	-	-
ALYCGAY	0010	C6 ALLEY	BLACKIE RD	WOOD ST	2	L	1,489	18	26,802	G	-	-
SOUTRD	0010	CALLE DE LOS AGRINEMSOR	SOUTHBANK RD	BEGIN PAVEMENT	2	L	1,455	20	29,100	G	-	-
CAMHRD	0020	CAMPHORA RD	END OF PAVEMENT	NORTH END	2	L	2,726	18	49,068	G	-	-
CAMHRD	0030	CAMPHORA RD	SOUTH END	SILLMAN RD	2	L	6,879	18	123,822	G	-	-
CEDAAY	0010	CEDAR AV	SOUTH END	ARROYO SECO RD	2	L	1,907	13	24,791	G	-	-
COLLRD	0010	COLLINS RD	SOUTH END	BEGIN PAVEMENT	2	L	703	27	18,981	G	-	-
CRSCRD	0010	CROSS COUNTRY RD	LOWES CANYON RD	VINEYARD CANYON RD	1	L	13,853	11	152,383	G	-	-
CRSCRD	0040	CROSS COUNTRY RD	END OF PAVEMENT	DEER CANYON	2	L	18,174	21	381,654	G	-	-
CROSRD	0060	CROSS COUNTRY RD	END OF PAVEMENT	DEER CANYON	2	L	8,802	22	193,644	G	-	-
DIXIST	0020	DIXIE ST	PLEYTO ST	SALINAS ST	2	L	366	23	8,418	G	-	-
DUDLRD	0010	DUDLEY RD	SOUTH END	PARIS VALLEY RD	1	L	4,184	15	62,760	G	-	-
DUNBRD	0010	DUNBARTON RD	HWY 101 (S)	BEGIN PAVEMENT	2	L	563	16	9,008	G	-	-
ESCORD	0020	ESCOLLE RD	WEST END	GATE	2	L	4,562	26	118,612	G	-	-
FABRRD	0010	FABRY RD	HWY 146	01753FT NORTH OF HWY 146	2	L	1,753	18	31,554	G	-	-
FABRRD	0020	FABRY RD	01753FT NORTH OF HWY 146	NORTH END	2	L	5,839	16	93,424	G	-	-
FRUDRD	0010	FRUDDEN RD	JOLON RD	EAST END	1	L	6,399	18	115,182	G	-	-
GARRRD	0020	GARRAPATOS RD	END OF PAVEMENT	EAST END	1	L	3,380	15	50,700	G	-	-
GILLRD	0010	GILLETT RD	JOLON RD	LOCKWOOD RD	1	L	2,639	16	42,224	G	-	-
HARTEX	0010	HARTNELL RD EXTENSION	SOUTHEAST END	END OF PAVEMENT	1	L	962	14	13,468	G	-	-
HESPRD	0010	HESPERIA RD	SOUTH END	SMITH RD	1	L	6,779	14	94,906	G	-	-
HOBSAV	0010	HOBSON AV	SOUTH END	CENTRAL AV	1	L	5,224	12	62,688	G	-	-
JORGRD	0010	JORGENSON FLATS RD	SOUTH END	ARROYO SECO RD	2	L	726	13	9,438	G	-	-
LCKSRD	0050	LOCKWOOD SAN ARDO RD	END OF PAVEMENT	03070FT SOUTH OF PARIS VALLEY	2	L	1,626	20	32,520	G	-	-
LCKSRD	0060	LOCKWOOD SAN ARDO RD	03070FT SOUTH OF PARIS VALLEY	PARIS VALLEY RD	2	L	3,070	20	61,400	G	-	-
MRTZRD	0020	MARTINEZ RD	02720FT SOUTH OF LOCKWOOD JOLO	06189FT SOUTH OF LOCKWOOD JOLO	2	L	3,470	23	79,810	G	-	-
MRTZRD	0040	MARTINEZ RD	LOCKWOOD JOLON RD	LOCKWOOD SAN ARDO RD	1	L	5,274	15	79,110	G	-	-
OAKAAV	0070	OAK AV	1ST ST	EAST END	2	L	394	17	6,698	G	-	-
OAKVRD	0010	OAK VALE RD	WEST END	END OF PAVEMENT	2	L	1,040	12	12,480	G	-	-
OLDSRD	0290	OLD STAGE RD	GATE	NORTH END	2	L	2,954	25	73,850	G	-	-
PARSRD	0010	PARAISO SPRINGS RD	SOUTHWEST END	END OF PAVEMENT	2	L	2,499	16	39,984	G	-	-
PASODO	0040	PASO HONDO	END OF PAVEMENT	NORTH END	2	L	793	18	14,274	G	-	-
PATRLN	0010	PATRICIA LN	EAST END	SOUTH END OF PAVEMENT	2	L	663	16	10,608	G	-	-
PAULRD	0010	PAULSEN RD	LOCKWOOD JOLON RD	EAST END	2	L	1,186	19	22,534	G	-	-
PINERD	0010	PINE CANYON RD	WEST END	GATE	2	L	11,243	19	213,617	G	-	-
PINERD	0020	PINE CANYON RD	GATE	END OF PAVEMENT	2	L	8,644	19	164,236	G	-	-



**Monterey County**  
Section Description Inventory - Sorted by PCI

Road ID	Section ID	Road Name	Begin Location	End Location	# of Lanes	FC	Length (ft)	Width (ft)	Area (sf)	ST	PCI Date	PCI
RAMURD	0010	RAMUS RD	HWY 146	EAST END	2	L	7,486	12	89,832	G	-	-
REDHRD	0020	RED HEAD CANYON RD	END OF PAVEMENT	EAST END	1	L	9,638	15	144,570	G	-	-
RELIRD	0010	RELIZ CANYON RD	SOUTH END	GATE	2	L	1,873	17	31,841	G	-	-
SALIST	0010	SALINAS ST	DIXIE ST	BRADLEY RD	2	L	271	23	6,233	G	-	-
SALIST	0050	SALINAS ST	WEST END	BEGIN PCC	2	L	1,034	18	18,612	G	-	-
SLACRD	0040	SLACKS CANYON RD	END OF PAVEMENT	NORTH END	2	L	18,015	16	288,240	G	-	-
THMCRD	0010	THOMPSON CANYON RD	SOUTH END	END OF PAVEMENT	1	L	4,636	14	64,904	G	-	-
TOPORD	0010	TOPO RD	METZ RD	EAST END	2	L	822	20	16,440	G	-	-
VIOLRD	0010	VIOLINI RD	ABBOTT RD	NORTH END	2	L	1,327	19	25,213	G	-	-
WELLRD	0020	WELLS RD	END OF PAVEMENT	NORTH END	2	L	605	16	9,680	G	-	-
WHITRD	0010	WHITE RD	SOUTH END	VINEYARD CANYON RD	2	L	3,764	17	63,988	G	-	-

**EXHIBIT “C”**



7638 NORTH INGRAM AVENUE, SUITE 201 • FRESNO, CALIFORNIA 93711 • PHONE 559.435.6077 • FAX 559.435.6079

June 18, 2021

Mr. John P. Kinsey  
Attorney At Law/Shareholder  
Wanger Jones Helsley  
A Professional Corporation  
265 East River Park Circle, Suite 310  
Fresno, California 93730

**RE: Narrative Commentary On The Impacts Of Proposed Government Legislation  
On Rural Property Values In California**

Dear Mr. Kinsey:

Pursuant to your request of May 24, 2021, I am herein transmitting this correspondence which evaluates the market related considerations of impending legislation on behalf of the California Board Of Forestry relative to Fire Protection's Fire Safe Regulations.

In brief introduction, I hold the California Certified General Appraiser license and have been since the initial years of the formation of the (now) California Bureau Of Real Estate Appraisers. I have been certified by such and hold the highest level of license issued by the State of California. I have been a practicing appraiser for 35 years and given my state license, am permitted to appraise any type of real property in California. I have conducted appraisal services of differing types of properties in the majority of the California counties. Moreover, in that my office is in Fresno, California, the majority of my work tends to be in counties characteristically rural and agriculture in nature, to include those in the Sierra Nevada and Coastal ranges of northern and Central California. My comments, in general, largely relate to the market place and factors which pertain to property values.

California is the most populous of the United States. As it relates to discussions in this correspondence, more importantly, it is amongst the most rural of the states as well. Of the some 104,765,000 acres in California, as a whole, about 65,000,000 acres are categorized as “wildlands”. These are not just forested areas, but rangeland, watershed and chaparral areas; are mostly uplands and mountains; and are both privately and publically held. Specifically, about half (33,000,000) of the wildlands acreage are forests. Of these, about 57 percent are under government (Federal, State, County, Local, etc.) ownership; 40 percent are owned by private families, Native Americans or private companies; and the balance, about three percent, are held by Land Trusts which have the objective of land preservation.

The University Of California identifies about 9,000,000 acres of land within this category (33,000,000 of forest encumbered wildlands) as being owned by private individuals/families. Of these, about 90 percent are said to be land holdings of 50 acres or less. In other words, about 8,100,000 acres of native wildlands/forested areas in California are from one to 50 acres in land area and are owned by private individuals or families.

This is an integral figure in consideration of where these lands are located. In California, there about 30 to 40 of the 58 counties which are rural in composition. (This is by population, location, linkage to metropolitan areas, geographic composition and surroundings, etc.) Depending upon the resource, this is about 52 to 69 percent of the state’s counties and while the major metropolitan areas (some four or five) in California hold the majority of the population, by means of the land area of California and the counties which are rural in attributes, they cannot be overlooked in terms of understanding value trends, what creates value and the significance of the individuals whom elect to live in these rural areas.

A primary motivator of individuals living in rural areas of California is affordability. While, in recent history, there has been a migration to the major metropolitan areas of California, for a host of reasons, presently, there is a counter directional trend, with market participants

gravitating to suburban and rural markets, solely on the merits of affordability in pursuance of the, “American Dream” of home ownership.

The California Association Of Realtors (CAR), on May 11, 2021, published the 2021, First Quarter, Housing Affordability figures which continues to affirm the vast differences of housing affordability in Counties within California. In example, the United States, in 2021, First Quarter, has a Median Home Price of \$319,200. Fifty-four percent of the population could afford the median price dwelling; this required a minimum qualifying income of \$58,000. This is in stark contrast to California wherein, in the 2021, First Quarter, 27 percent of the state could afford the median price dwelling of \$720,490; this necessitated a minimum qualifying income of \$131,200.

In example, Mariposa County has a 37 percent Home Affordability Index in the 2021, First Quarter. This is for a Median Home Price of \$400,000; and a minimum qualifying income of \$72,800. Madera County has a 46 percent Home Affordability Index in the 2021, First Quarter. This is for a Median Home Price of \$349,900; and a minimum qualifying income of \$63,600. Monterey County has one of the lowest affordability indexes in California. The 2021, First Quarter index for Monterey County is 17 percent. This is for a Median Home Price of \$865,000; and a minimum qualifying income of \$157,600.<sup>1</sup>

Other rural counties in California very well support the correlation of housing affordability and living in rural counties. Lassen County has a Home Affordability Index of 62 percent, based on a Median Priced Home of \$249,000 and a minimum qualifying income of \$45,200. Kings County has a Home Affordability Index of 58 percent, based on a Median Priced

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<sup>1</sup> However, this is largely skewed relative to the influence of those cities which are fronting the Pacific Ocean and the population density in those surrounding areas such as Monterey, Carmel, Carmel Valley, Seaside, etc. This is contrasted to the inland cities such as King City which has a Home Affordability Index of 105 percent, based on a Median Priced Home of \$276,224 and a minimum qualifying income of about \$50,000; Soledad which has a Home Affordability Index of 92 percent, based on a Median Priced Home of \$388,932 and a minimum qualifying income of about \$72,000; or Greenfield which has a Home Affordability Index of 96, based on a Median Priced Home of \$329,633 and a minimum qualifying income of about \$61,000. These rural areas, not to mention others such as Big Sur, Parkfield, Lockwood, etc. characterize the rural areas of an affluent county and affirm the preference, due to housing affordability, to live in these areas.

Home of \$282,500 and a minimum qualifying income of \$45,200. Tuolumne County has an Home Affordability Index of 49 percent, based on a Median Priced Home of \$350,000 and a minimum qualifying income of \$63,600. Tulare County has a Home Affordability Index of 47 percent, based on a Median Priced Home of \$300,000 and a minimum qualifying income of \$54,800. Siskiyou County has a Home Affordability Index of 49 percent, based on a Median Priced Home of \$266,000 and a minimum qualifying income of \$48,400.

These figures affirm, regardless of the underlying strength and attraction the metropolitan areas hold, the rural counties throughout California are more promising in terms of the home affordability than anywhere else than California. This remains a major motivator of home ownership in California.

However, the affordability levels are relative to those areas not being unduly impacted by externalities. The publication, *Rural Property Valuation* (Appraisal Institute, 2017, page 12) describes: *Externalities may refer to use or physical attributes of properties near the subject property or the economic conditions that affect the market in which the subject property competes.* Similarly, *The Dictionary Of Real Estate Appraisal* (Appraisal Institute, Sixth Edition) defines Externalities as: 1) *The principle that economics outside a property have a positive effect on its value while diseconomics outside a property have a negative effect on its value.* 2) *In appraisal, off-site conditions that affect a property's value. Exposure to street noise or proximity to a blighted property may exemplify negative externalities, whereas proximity to attractive and well maintained properties or easy access to mass transit may exemplify positive externalities.*

The issue of externalities applies with the “Four Forces That Influence The Value Of Real Property”. This concept identifies the four primary influences on the value of every parcel of real estate in the market. This includes *Social Trends; Economic Circumstances; Government Controls; and Environmental Conditions.* (*Rural Property Valuation*, Appraisal Institute, 2017, page six). As it pertains to the concern of additional legislation on rural

property markets in California, the “Government Controls” are of utmost importance and relevance.

Examples of such Government controls are traditional “police powers”, building codes and ordinances, health and safety guidelines and legislation, transportation regulation and expansion, zoning, etc. These expand and broaden as municipalities and public/quasi-public agencies are faced with matters which cause concern for the population within that jurisdiction; this pertains to both life and property. In balance, these provide the quiet enjoyment and positive influences which are inherent of property rights and ownership.

When these are excessive, they are an external influence which acts contrary to a balanced real estate and related land use markets. As has been previously cited, they create “diseconomics”. Any form of new legislation, of a material nature, does externally impact the market as, nearly always, there is an impact on the market’s acceptance of the legislation and what it will ultimately cost a property owner. The market well accepts and understands the balanced need of government in public safety (police and fire), transportation, land use planning, etc. However, examples of the market initially suffering as a result of legislation (and needing to go through a considerable adjustment period) would be the American’s With Disability Act (ADA), the necessity of seismic upgrades to building improvements (new and existing), the requirement of fire sprinkler installation in new residences, etc. Unquestionably, these are all “good” in terms of the intention to better safety and health practices. But the costs to the market were/are billions of dollars, without any direct, measurable recapturable economic benefit to the property owner. Even discretionary home improvements present the same dilemma in the marketplace, where (in example) a homeowner will expend \$25,000 for a swimming pool, yet in a resale scenario, it may only bring \$10,000 to \$15,000 in economic return when the property is sold.

There are times where a requirement is economically inconsequential and the market has no response as a result of such a mandate. This would include smoke and carbon monoxide detectors. These are \$25 to \$75 items and have a direct correlation with the reasonable and balanced benefit in contrast to the cost.

In real estate economics, cost does not equal value. Expending a dollar does not mean a dollar added to the value of the asset. Value is created by the market's want of an item; and the effective purchasing power to afford such. In California, excessive ownership costs have a drastic economic consequence. Legislation which necessitates additional costs to a property owner yields a higher barrier to entry which does and will compound the issue of home ownership affordability.

Any legislative proposal to increase the costs of home development in rural California would impair the considerable benefits of home ownership in these areas. A proposal to require an "all weather, hard surface" driveway for all new improvements would dramatically impact home ownership, among others, in the state.

Relative to the costs of such driveways this could add an additional \$25,000 to \$75,000 to an average home construction budget. There is no known, direct economic benefit to the value of a residence relative to such. In example, a home construction budget of \$450,000 (excluding land) in terms of hard/direct costs; and a dirt/gravel form of driveway system, with a lot of \$100,000, would result in a conforming residence of \$550,000. Asphalt costs are materially less than concrete costs (at this time in the marketplace). Nonetheless, the cost of an asphalt paved, all weather driveway (entirely depending upon size of the driveway) may add an additional \$50,000 to that same residence. Increasing the residence to a total cost of development of \$600,000 (ten percent more in costs; 9.09 percent more in total finished product/residence, including land), does not mean the property is now worth \$650,000. A rural market is typically indifferent to the type of driveway and understanding this is not a required, value added improvement, would only necessitate a buyer expend more, with no measurable or known direct value benefit to the finished home.

Even if a homeowner concedes to these additional costs and is capable of doing so, it has increased the basis to a seller/homeowner and is no less a negative influence on the affordability of the home, surely in this case, excluding market participants whom would have otherwise been qualified to buy the home prior to the legislation. (In other words, the cost of the home is nine to ten percent more, therefore, the added costs would, prevent otherwise qualified buyers from acquiring the residence as an additional \$50,000 would disqualify those capable buyers by having to expend an additional \$50,000 in the home acquisition process).<sup>2</sup>

Thus, an all weather driveway, while an ideal amenity in elite, high dollar, urbanized communities, is not an economic benefit, value added improvement to a property in the typical, rural California community. Many of these communities have actual public right of ways which are not paved, but compacted, crushed granite/rock which serves those communities, year around, in nearly all weather conditions. The majority of the existing

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<sup>2</sup> Asphalt is a petroleum based construction component. It is used in the example as concrete can be 50 to 100 percent more to develop the same driveway. The market would, for an improvement like this, lacking specific legislation, gravitate to the lower of the commodity costs. These costs are volatile and can materially change in a few weeks time. Moreover, under this \$50,000 example, not including the engineering costs of the driveway, this would be a surface area of about 5,000 square feet, or a driveway ten feet by 500 feet in length. These are not actual costs, but an example of an “average” budget for a rural residence which may be on ten or 20 acres and require a 500 foot driveway to the main residence. Still further, I have observed building improvements after the Fall of 2020 Creek Fire in the Sierra Nevada of Central California. In the case of those impacted and in the direct fire line, all of the building and site improvements were destroyed. This included wells, septic tanks, concrete foundations of homes, infrastructure, landscaping, patios, the residence and asphalt paved driveways. Depending upon the intensity and location of the fire, this actually added to the problem of suppressing the fire given the petroleum based asphalt product and it fueling the fire.

residences, relative to affordability and overall, practical, functional utility, have gravel driveways. Historically, these have provided decades of serving those residences with unrestricted ingress and egress and are an accepted, proven improvement in the open marketplace by fact the buyers of such properties are not requiring asphalt or concrete paved driveways in rural California communities.

There is also a possible unintended consequence to the existing rural residential real estate market in that, upon such legislation, all of the existing, rural California residences would be non-conforming. (They would not have the same improvements and such homeowners may be required to install/construct such a driveway if they were to do any remodeling, redevelopment, etc. of the residence. This would be another massive impairment to the market, one which would constrain home improvement, to include development of auxiliary dwelling units, without expending an additional \$25,000 to \$75,000). This could also increase insurance premiums which are already astronomical for rural California residents and, once again, by development of such, not provide any direct economic benefit to the property owner (as the cost of such is not a direct, measurable value added benefit to the property).

Even more critical is, the preceding example is a “best case” scenario as I am discussing the consequences of the additional costs to a single property owner. When the market as a whole is considered, there are multiple scenarios, all which would exponentially affect a market. The preceding scenario is in consideration of developing a single vacant, rural lot to a finished residence. It does not take into account a larger land tract which would necessitate infrastructure to include a network of streets to and from the collector streets, as well as those vacant, prospective lots which would also, each, independent of the subdivision, require driveway improvements of \$25,000 to \$75,000. This would result in proposed developments having millions of dollars in road costs which, historically, have never been required. To assume those millions could be prorated and simply passed onto a property owner is not how a balanced market operates and is absurd in the assumption

that the expenditure of costs results in open, marketplace value. To the contrary, it will block otherwise qualified buyers whom cannot afford those additional costs in the loan approval and home purchasing process.

Also, the market is not indifferent to the added costs in cases of non-conformity/non-compliant properties. Assuming the proposed legislation requiring hard, all weather driveways only impacts the new housing market is erroneous and not factual in the premise that the new and existing real estate markets are inter-related. For instance, if ownership of the existing residence of \$500,000, in a rural market, is wanting to add a second floor or otherwise expand the dwelling, they must do so under the basis they now presently have a non-conforming residence. To be in compliance means they must, as part of a room/home expansion-addition, develop an all weather driveway. The real estate market, as a whole, has an aversion to non-conforming properties. They are difficult, if not impossible (in some cases) to insure. They are not going to benefit from the most competitive home purchase loans in the market as these properties must be conforming to qualify for such. They will have to resort to non-compliant financing which can be three hundred to fifteen-hundred basis points higher. And perhaps most importantly, it presents an additional risk to ownership, one which is compensated, most often, buy price compromise (lower priced residence) to account for the non-conforming property.

The market does not simply “absorb” the additional costs. The market dictates and decides that, if a non-recapturable improvement cost is mandated, that asset (the existing residence) must contract in value to now sufficiently attract qualified buyers in that market.

These factors, once again, are not hypothetical, but are “real world” barriers to buyers entering the most affordable housing in the state: the rural markets. The ripple effect on a real estate market, with both new and existing housing, would be universal in both location (the entire state) and the profound influence on affordability of all rural housing, creating risks which would diminish the value of the existing housing stock as well.

Lastly, this legislation could impact other property users which are quasi-residential in nature, to include the hospitality industry (bed and breakfast, inns, hotels, etc.); private campgrounds; and not-for-profit (Boy Scouts, Girl Scouts, Religious, Girls and Boys Clubs, etc.) facilities which have year round opportunities for under-privileged and low-income children, and most often, have limited budgets for extraordinary capital expenditures which do not directly serve their purpose and charter as an organization.

Summarized, housing affordability is a major issue in the State of California. Rural California is increasingly providing opportunities and is a viable option for more affordable home ownership. California, relative to the vast nature of such and the diverse natural resources and geography it has, enjoys millions of acres of privately owned wildlands which are under private ownership. These land tracts of less than 50 acres have, for decades, have served as the platform for rural housing, often located in smaller communities, yet those which have survived many economic ups and downs over the years, including earthquakes, fires, floods, etc. To impose additional, substantial development costs of rural residences by requiring development of hard surface driveways would drastically impact home affordability in these communities, with no direct economic benefit to the homeowner. Efforts to expand and better fire prevention enforce existing laws and regulations, and focus on wildlife fire safety would enrich the property owners and would not be a barrier to home ownership in rural California.

Respectfully submitted,

Rick P. Smith, MAI, ASA, SR/WA  
State Of California Certified General  
Real Estate Appraiser No. AG005172  
Expires On November 14, 2022  
President, Aaron Realty Group

**Professional Qualifications Of Rick P. Smith, MAI, ASA, SRWA**

7638 North Ingram Avenue, Suite 201, Fresno, California 93711

Office: (559) 435-6077 Facsimile: (559) 435-6079

E-Mail: [refvalue@att.net](mailto:refvalue@att.net)

Mr. Smith has been employed as a real estate appraiser & land use consultant in California since 1986. He is registered with the State of California as a Certified General Real Estate Appraiser, and is currently president of Aaron Realty Group, a real estate appraisal and consultation firm, primarily providing services in the San Joaquin Valley & adjoining mountain ranges. The practice primarily deals with commercial and agriculture properties, however, he functions with emphasis in several subspecialties, to include churches/houses of worship, agriculture facilities and restaurant properties. The practice is extensively involved in the appraisal of agriculture assets, to include livestock grazing land/ranches, irrigated field cropland, permanent crops (orchards, vineyards, groves, etc.) He holds the MAI designation of the Appraisal Institute, the ASA designation of the American Society Of Appraisers, as well as the SRWA of the International Right of Way Association.

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**Education**

Graduate, Magna Cum Laude, National University, San Diego, California: Bachelor Of Business Administration, 1991  
Graduate, School Of Mortgage Banking, Mortgage Bankers Association, Northwestern University, Chicago, Illinois, 1991  
Graduate, National Graduate School Of Real Estate Finance, American Bankers Association, Southern Methodist University, Dallas, Texas, 1993  
Graduate, Advanced Real Property Tax School, Institute For Professionals In Taxation, Emory University, Atlanta, Georgia, 1998  
Graduate, University Of Shopping Centers, International Council Of Shopping Centers, Wharton School Of Business, University Of Pennsylvania, 2005  
Graduate, California Receiver's Forum, Receiver's Law & Practice, Loyola Law School, Loyola Marymount University, Los Angeles, California 2009

**Appraisal Institute Courses Successfully Completed (35-40 Hour Courses)**

Appraisal Principles, N. Texas State University-10/86	Basic Valuation Procedures, University Of Florida-2/87
Residential Valuation, Dartmouth College-8/86	Industrial Valuation, University Of Colorado-10/87
Market Analysis, University Of North Carolina-7/87	Standards Of Professional Practice-CSU, Fresno-9/91
Capitalization Theory, Part A, Indiana University-3/87	Capitalization Theory, Part B, University Of Georgia-3/94
General Application, Dallas, Texas-2/94	Highest & Best Use Analysis, University Of San Diego-6/94
Advanced Applications, UC Berkeley-3/95	Report Writing/Value Analysis, University Of San Diego-7/95

**American Society Of Appraisers Courses Successfully Completed**

Introduction To Machinery & Technical Specialties/MTS201-Anaheim, California  
Machinery & Technical Specialties Valuation Methodology/MTS202-Anaheim, California  
Machinery & Technical Specialties Valuation-Advanced Topics & Case Studies/MTS203-Anaheim, California  
Machinery & Technical Specialties Valuation-Advanced Topics & Report Writing/MTS204-San Francisco, California

**American Society Of Farm Managers & Rural Appraisers Courses Successfully Completed**

Appraising Agriculture Chattels-UC Davis-11/95  
Appraising Permanent Plantings-Visalia, California-3/96  
Advanced Rural Appraisal (A30)-Denver, Colorado-6/96  
Valuation Of Conservation Easements & Other Partial Interests (A315)-Denver, Colorado-5/14

Additionally, Mr. Smith has attended and successfully completed courses and seminars in real estate law, real estate economics, real estate finance, real estate practice, real estate principles, cost estimation, building inspection, environmental assessment in appraisal, FIRREA, FNMA, URAR, USPAP, appraisal regulations of the federal banking agencies, apartment appraisal, appraisal review, affordable housing valuation, appraising nursing care facilities, appraising small hotels & motels, litigation valuation, expert testimony, easement valuation, business valuation, detrimental conditions, forensic appraisal analysis, fair value accounting, Yellow Book/UASFLA, etc.

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**Experience**

Principal, *Aaron Realty Group*-1997 to Present (was Aaron & Smith Asset Advisory Group)  
VP/Senior Commercial Appraiser, *ValliWide Bank*-1994 to 1997  
Principal, *Valley Valuation Services* (was Aaron & Smith Asset Advisory Group)-1992 to 1994  
VP/Manager Of Appraisal Services, *ValliWide Bank*-1988 to 1992  
Associate Appraiser, *Bank Of America*-1986 to 1988

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**Professional Affiliations and Organizations**

MAI, Member (11155) Appraisal Institute, Chicago, Illinois  
ASA (Accredited Senior Appraiser), Urban/Real Property, American Society of Appraisers, Washington, D.C.  
SRWA (Senior Right of Way Member), International Right of Way Association, Torrance, California  
Member, International Association Of Assessing Officers, Chicago, Illinois  
Associate Member, Urban Land Institute, Washington, D.C.  
CCIM, Commercial Investment Real Estate Institute (CIRES), Chicago, Illinois  
California Probate Referees Association, San Francisco, California

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**Special Appointments**

In July of 2004, I was appointed by State Of California Controller, Steven Wesley, as Probate Referee for Fresno County. As such, I am a sworn officer of the court and report to the Superior Court Judge of the probate division. My role & function is the valuation of all assets being probated in the county, as well as those for guardianships & conservatorships. This includes but is not limited to real property, business enterprises, mineral rights, personal property, marketable securities, etc.

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**Professional Credentials**

State Of California, Certified General Real Estate Appraiser No. AG005172  
State Of California, Real Estate Broker No. 00944402

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**Property Types Valued**

Assignments have included the valuation of residences, PUDs, condominiums, mobile homes, subdivisions, vacant lots, raw land, office buildings, bank buildings, commercial service buildings, apartment buildings, warehouses, truck terminals, bulk oil plants, service stations, convenience markets, motels, funeral homes, convalescent homes, day care centers, churches/houses of worship, shopping centers, retail buildings, gymnasiums/fitness centers, restaurants (dine in & fast food), truck stop/travel centers, private landing strips, cold storage facilities, farms, ranches, auto dealerships, medical facilities, duck clubs, private zoo, water theme park, skating rink, etc. I have also conducted hundreds of appraisals on easements, including surface & subsurface, as well as mineral rights, to include active, producing petroleum interests.

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**Clients Served**

Federally Insured Financial Institutions, Realtors, Trust Companies, Insurance Companies, Pension Funds, Attorneys, Certified Public Accountants, Private Investors, Developers, Mortgage Companies, Governmental Agencies, REIT's, Major Corporations, etc.

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**Civic, Volunteer and Professional Activities**

President-International Right Of Way Association, Chapter 50 (Past-2002)  
President-Central California Chapter Of The American Society Of Appraisers (Past-2000)  
Fresno County Assessment Appeals Board (Appointed 2007 to current. Have served as Chairman, Vice-Chairman, Member At Large; Now As Alternate)  
VP-Board Of Directors (Current), Division 1, California Probate Referee's Association  
Public Relations Chairperson/Treasurer, Central California Chapter of the Appraisal Institute (Past)  
Appraisal Institute (Ethics/Standards of Practice Panel, National Experience Review Panel, Comprehensive Examination Panel, etc.)  
Ag Lenders Society, Member  
Keynote speaker & guest lecturer at various seminars, classes, and conferences, to include the Appraisal Institute, California Mortgage Bankers Association, Building Industry Association, California State University, Fresno, Fresno County Bar, etc.

# **EXHIBIT “D”**

# DRAFT DOCUMENT

## Board of Forestry and Fire Protection

### INITIAL STATEMENT OF REASONS “State Minimum Fire Safe Regulations, 2020”

#### Title 14 of the California Code of Regulations (14 CCR), Division 1.5, Chapter 7 Subchapter 2, Articles 1-5

##### **Adopt**

§§ 1270.07; 1273.10; 1273.11; 1273.12; 1273.13; 1275.05; 1275.06; 1275.07; 1276.05;  
1276.06

##### **Amend**

§§ 1270.00; 1270.01; 1270.03; 1270.03; 1270.04; 1270.05; 1270.06; 1273.00; 1273.01;  
1273.02; 1273.03; 1273.04; 1273.05; 1273.06; 1273.08; 1273.09; 1274.00; 1274.01;  
1274.02; 1275.00; 1275.01; 1275.02; 1275.03; 1275.04; 1276.00; 1276.01; 1276.02;  
1276.03; 1276.04

##### **Repeal**

§§ 1271.00; 1274.03; 1274.04

#### **INTRODUCTION INCLUDING PUBLIC PROBLEM, ADMINISTRATIVE REQUIREMENT, OR OTHER CONDITION OR CIRCUMSTANCE THE REGULATION IS INTENDED TO ADDRESS (pursuant to GC § 11346.2(b)(1))...NECESSITY (pursuant to GC § 11346.2(b)(1) and 11349(a))....BENEFITS (pursuant to GC § 11346.2(b)(1))**

Pursuant to Public Resources Code 4290, the Board is required to “...adopt regulations implementing minimum fire safety standards related to defensible space” applicable to “the perimeters and access to all residential, commercial, and industrial building construction. In 2018, the Legislature passed and the Governor signed SB 901 (Dodd), which expanded the applicability of the regulations promulgated under PRC 4290 to land in the Local Responsibility Area Very High Fire Hazard Severity Zone (VHFHSZ). SB 901 also revised PRC 4290 to require the Board to more frequently update regulations relating to fuel breaks and greenbelts near communities, and to preserve undeveloped ridgelines to reduce fire risk and improve fire protection.

The regulations set certain standards for future design and construction of structures, subdivisions and developments in SRA and VHFHSZ and provide for basic emergency access and perimeter wildfire protection, as well as standards for fuel breaks, greenbelts, and measures to protect undeveloped ridgelines. These standards provide for emergency access and egress; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification, Fuel Breaks, Greenbelts, and measures to preserve undeveloped Ridgelines. This proposed action amends the existing regulations for the purposes of addressing the general applicability of these standards; regulating fuel breaks and greenbelts near communities; including measures

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to protect undeveloped ridgelines; and improving regulatory clarity and ensuring the uniform implementation of wildfire protection standards association with residential, commercial, and industrial building construction.

Such regulations are necessary to inhibit the ignition and spread of wildland fires in the wildland-urban interface, the area where buildings and vegetation are sufficiently close that a wildland fire could spread to a structure or a structure fire could ignite wildland vegetation. Studies have shown that urbanization has a pronounced effect on fire activity: fire activity has increased in Mediterranean ecosystems, such as California's, across five continents,[1] the majority of fires are burning closer to developed areas,[2] and fire activity peaks in areas where urbanization has occurred but a large proportion of native vegetation remains.[3] This wildfire hazard is a significant threat to human and natural resources throughout the 31 million acres and over 800,000 homes in the SRA as well as the 865,738 acres in the VHFHSZ. The imminent nature of the fire hazard problem has been repeatedly recognized by many high profile efforts, including the Governor's Blue Ribbon Fire Commission of 2004; U.S. General Accounting Office report on western National Forest fire conditions; the Western Governors' Association promulgation of the National Fire Plan; the USDA Forest Service (USFS) Sierra Nevada Forest Plan Amendment, 2004; legislation proposed by both houses of the California Legislature; and Governor Brown's Executive Order B-52-18 (May 2018).

The threat to homes from wildfire is well documented, and major wildland fires in California threaten a wide range of public and private assets. In 2003, wildfires destroyed more than 730,000 acres, 3,600 residential structures, and resulted in the tragic loss of 25 lives in California. The southern California wildfires that year were followed by mudslides that tragically killed 14 people. The subsequent mudslides possibly resulted from vegetation lost to wildfire and flash flooding. In 2017, wildfires burned over 1.3 million acres, and at the time five of those fires were in the top twenty most destructive in the state. The 2017 wildfires killed 41 civilians and 2 firefighters and destroyed or damaged over 10,000 structures. The Thomas Fire, in December, burned over 280,000 acres and, at the time, was the largest wildfire in California history.

The record setting year of 2017 was soon eclipsed by even greater destruction and casualties in 2018 and 2020. The Camp Fire, in Butte County, destroyed nearly 19,000 structures, including most of the town of Paradise, and killed 85 civilians. Six fires from 2018 and 2020 have eclipsed the Thomas Fire in size, and nine fires from 2018 and 2020 have entered the top 20 most destructive wildfires. These back-to-back-to-back record-breaking fire seasons are unprecedented in California; previous records for the largest, deadliest, and most destructive wildfires had stood for decades, some for generations.

Having narrow and overgrown roads leading into and out of communities that lie in the wildland urban interface setting are jeopardizing the safety and lives of not only firefighters but the residents who live in these communities. These narrow roads do not and will not allow for the simultaneous use by evacuating citizens and responding fire department equipment. The 2006 Esperanza Fire claimed the lives of five firefighters, and the final report lists roads as a contributing factor that lead to the deaths of the

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firefighters. In 2015, poor road networks led to deaths in the Valley Fire. Of the 85 people killed in the Camp Fire (2018), seven of them were found in their cars - four perished in a neighborhood with particularly steep terrain and overgrown brush along the finger of a ridge.

Temperatures in the American West have increased at a rate of twice the global average. Over the last 30 years, there have been four times the number of large and long-duration forest fires in the West, the length of fire season is two months longer, and the size of wildfires has increased.[4] Commensurately, the costs of wildfires has increased over time. From 1979 to 1990, emergency fund expenditures exceeded \$100 million (2001 dollars) only once. Between 1990 and 2001, losses exceeded \$100 million three times. Between 2001 and 2015, damages have exceeded \$100 million seven times.[5] Suppression expenditures have also increased, exceeding \$200 million eleven times since 2000.[6] It is within this increasingly dangerous and expensive context the Board seeks to establish minimum fire safety standards for development in the SRA and VHFHSZ to provide for civilian and firefighter safety and to protect natural resources and the environment.

2017 was, at the time, a record-setting year for wildfire activity in California, with 9,560 fires burning over 1.5 million acres of land. In response, during the next year the Legislature passed and the Governor signed SB 901 (Dodd), which amended PRC 4290 to expand the scope of the regulations to the LRA VHFHSZ; to require the Board to write regulations for fuel breaks and greenbelts near communities; and establish measures for preserving undeveloped ridgelines to reduce fire risk and improve fire protection.

The **problem** is that the regulations currently do not include measures to protect undeveloped ridgelines or standards for fuel breaks and greenbelts near communities. In addition, the regulations require updates for internal consistency and clarity. Processes for city and county compliance with the Fire Safe Regulations require amendments to address applicability, enforcement, and compliance in the LRA VHFHSZ. The regulations require greater specificity where and when local jurisdictions have flexibility when applying the Fire Safe Regulations in their communities and improvements to their general clarity.

The **purpose** of the proposed action is to

- Establish standards for fuel breaks and greenbelts near communities;
- Establish measures for the preservation of undeveloped ridgelines;
- Accurately reflect the applicable areas of the state where development may be subject to these regulations;
- Provide greater clarity regarding the types of development that may be subject to these regulations;
- Specify the conditions under which an existing road is subject to these minimum fire safety requirements;
- Reorganize the Fire Safe Regulations to reduce confusion and improve technical implementation and consistency;

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- Reduce confusion regarding the inspection and enforcement agencies;
- Ensure definitions for these regulations are relevant, up to date, and consistent with their usage in the following articles;
- Promote local jurisdiction compliance with the Fire Safe Regulations and to clarify the process by which that occurs;
- Apply field-tested methods and industry-accepted computer-aided modeling to ingress and egress requirements; and
- Increase the flexibility offered to local jurisdictions in implementing the minimum standards provided in these regulations.

The **effect** of this proposed action is to establish standards for fuel breaks and greenbelts that protect communities; preserve undeveloped ridgelines; create clear, specific standards for where and when the regulations apply; amend the requirements for fire safe development for consistency and clarity; provide clearer lines of authority and implementation processes; and create standards that reflect modern firefighting apparatus dimensions and fire prevention policy.

The primary **benefit** of the proposed action is the continued protection of new and existing development in the SRA and LRA VHFHSZ from wildfire. These protection measures will increase the safety of people and property by providing minimum fire safety standards related to defensible space that may allow them to escape an oncoming wildfire; allow firefighters to find, defend, and protect their property from a wildfire; prevent the ignition of property due to flying embers or structure-to-structure ignition; and to protect natural resources and the environment. The proposed action will also increase government efficiency through the reduction of duplicative or inconsistent regulations. The action will improve regulatory compliance through considering stakeholder feedback to clarify the standards and requirements.

**SPECIFIC PURPOSE OF EACH ADOPTION, AMENDMENT OR REPEAL (pursuant to GOV § 11346.2(b)(1)) AND THE RATIONALE FOR THE AGENCY'S DETERMINATION THAT EACH ADOPTION, AMENDMENT OR REPEAL IS REASONABLY NECESSARY TO CARRY OUT THE PURPOSE(S) OF THE STATUTE(S) OR OTHER PROVISIONS OF LAW THAT THE ACTION IS IMPLEMENTING, INTERPRETING OR MAKING SPECIFIC AND TO ADDRESS THE PROBLEM FOR WHICH IT IS PROPOSED (pursuant to GOV §§ 11346.2(b)(1) and 11349(a) and 1 CCR § 10(b)). *Note: For each adoption, amendment, or repeal provide the problem, purpose and necessity.***

The Board is proposing action to **adopt** §§ 1270.07; 1273.10; 1273.11; 1273.12; 1273.13; 1275.05; 1275.06; 1275.07; 1276.05; 1276.06, **amend** §§ 1270.00; 1270.01; 1270.03; 1270.03; 1270.04; 1270.05; 1270.06; 1273.00; 1273.01; 1273.02; 1273.03; 1273.04; 1273.05; 1273.06; 1273.08; 1273.09; 1274.00; 1274.01; 1274.02; 1275.00; 1275.01; 1275.02; 1275.03; 1275.04; 1276.00; 1276.01; 1276.02; 1276.03; 1276.04, and **repeal** §§ 1271.00; 1274.03; 1274.04.

The **problems** are:

- The SRA is typically found in rural environments with low to moderate housing densities, and the standards in the Fire Safe Regulations were written with this

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context in mind. VHFHSZ are frequently more suburban or urban environments with higher housing densities, and the existing standards in the Fire Safe Regulations may not be appropriate for both development contexts.

- The Fire Safe Regulations do not currently contain specific standards for fuel breaks and greenbelts to protect nearby communities.
- The Fire Safe Regulations do not currently contain any measures to preserve undeveloped ridgelines.
- The Fire Safe Regulations do not provide enough clarity regarding fire safety standards for existing roads.
- In the last 30 years, firefighting apparatus and tactics have changed significantly, and the Fire Safe Regulations may no longer be functioning as intended as part of California's fire prevention and protection programs.
- The regulated public has reported confusion related to the regulations, and requirements that are difficult to implement or do not provide enough alternative methods for implementation.

The **purpose** of the proposed action is to make amendments to the SRA Fire Safe Regulations to address standards for fuel breaks and greenbelts; establish measures to preserve undeveloped ridgelines; establish standards for existing roads; fix areas of inconsistencies or conflicts; reflect modern definitions, firefighting equipment, and development patterns in California; and reorganize the regulations for improved compliance.

The below adoptions, amendments, and repeals are necessary to effectuate this purpose of this action.

The following universal changes were made within the regulations to accomplish this:

1. Defined terms were capitalized.
2. Cross-references to other sections of these regulations were updated to reflect any moved sections.
3. Arabic numerals were spelled out.

The following section-specific changes were made:

## **1270.00. Title**

The regulations were renamed to reflect their applicability to the Local Responsibility Area Very High Fire Hazard Severity Zones (LRA VHFHSZ) as well as the State Responsibility Area. This change is necessary to improve the clarity of the regulations as a whole; specifying that these are statewide minimum regulations will improve the implementation and application of these regulations, resulting in consistent statewide compliance.

## **1270.01. Definitions (previously "Purpose")**

The "Definitions" section was moved from § 1271.00 to § 1270.01 because many defined terms are used throughout Article 1, and it would provide clarity to the regulated public to define those terms before the reader comes across them in the rule text.

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The sentence “The following definitions are applicable to this Subchapter.” was added to the beginning of this section to add greater clarity for the regulated public. As many of these terms have different meanings in common use, it is necessary to specify that these definitions only apply to this Subchapter, and not other regulatory programs administered by the Board or other agencies. The terms in this section were all provided with subsection lettering to improve ease of reading and general clarity.

The term “Access” was added to these regulations and defined in order to distinguish when these regulations apply to the means to enter or approach the perimeter of a building from when these regulations are applicable to infrastructure found within the perimeter of the building construction. “Access” is defined as a route from a Building to the nearest Collector Road. The Federal Highway Administration requires local governments to identify roads in their jurisdiction based on their “functional classification,” which includes interstates, highways, arterials, collectors, and local roads. Collector roads function to gather traffic from the local neighborhood roads to bring travelers to intra-county locations. From a fire safety perspective, the collector roads gather vehicular traffic escaping a wildfire from the local roads in a neighborhood and distributes this traffic to potentially safer locations, such as an evacuation shelter. Because of the volume of traffic a collector road might carry, they are typically constructed of multiple traffic lanes and tend to be at least 15-20 feet wide. As the Fire Safe Regulations require existing roads to be at least 14 feet wide, and new roads to be at least 20 feet wide, collector roads are likely to meet the minimum standards in these regulations (see § 1273.05 and § 1273.12). Local roads and other roads leading from a building to a collector road, on the other hand, might be as narrow as 8-10 feet wide. As the Fire Safe Regulations’ standards for new roads are two, 20-foot wide traffic lanes (plus shoulders and striping) and the proposed standard for existing roads is a 14-foot road (with some additional mitigation measures), it is appropriate for the definition of “access” to include local roads and other roads along a route to the nearest collector road. This ensures any improvements necessary for existing roads to comply with these requirements are limited to the types of roads most likely to present life safety concerns during civilian evacuation and fire apparatus access.

The definition of “agriculture” has not been changed from its existing definition.

A definition for “Board” was added to provide clarity to the regulated public regarding which state Board was referenced in these regulations.

The definition of “building” remains unchanged from its existing definition, except that the term “building” was removed after “Utility and Miscellaneous Group U.” Structures classified as Utility and Miscellaneous Group U are not necessarily “buildings,” as defined in these regulations, so that term was deleted here for the purpose of clarity.

The definition of “CAL FIRE” is unchanged from its existing definition.

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A definition for “Clear Width” was added to these regulations to provide clarity regarding several requirements in these standards. The Road width requirements in §§ 1273.05 and 1273.12 both require horizontal clear widths in addition to the specific width of a traffic lane, and “clear width” is not a term in common usage. This definition is necessary to improve compliance with these regulations regarding this additional clear width.

A definition for “Collector Road” was added to provide clarity to the regulated public. In Title 23 of the Code of Federal Regulations § 470.105, the Federal Highway Administration requires local government to classify roads in their jurisdictions based on their functionalities, and provides criteria and guidance for doing so in “Highway Functional Classification Concepts, Criteria, and Procedures,” 2013 Edition, which is incorporated by reference into these regulations. This term is necessary because these regulations include standards for when an existing road needs to be improved for fire safety, and so it was necessary to determine how many, or what distance, or what types of roads would need to be improved to the standards in this Subchapter. Since collector roads are more likely to meet the road width standards in this Subchapter, it would be most effective for fire safety to require improvements to local roads and other roads, which tend to be narrower and less safe, that lead from a building to the collector road. Other alternatives, such as requiring existing roads within a certain distance of a building to meet fire safety standards, were determined to be arbitrary and lacking in a connection to fire safety. Defining “collector roads” requires road improvements only to those roads most likely to cause life safety issues during a wildfire.

The definition of “Dead-end Road” is not changed from its existing definition.

The definition of “defensible space” was revised to cross-reference the definition of “defensible space” in Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, section 1299.02(a). Those are regulations promulgated by the Board to implement PRC 4291, and using that definition in these regulations provides consistency between the Board’s regulatory programs and reduces confusion. These regulations in Subchapter 2 are similar in scope and purpose to those in Subchapter 3, as Subchapter 2 regulates “minimum fire safety standards related to defensible space” (PRC 4290(a)). Where this term is used, in § 1275.07 and 1276.03, it is referring to the same concept as the term “defensible space” is used in § 1299.02(a), so applying that definition in Subchapter reduces confusion and improves compliance.

The definitions of “development” and “director” are unchanged from their existing definitions.

The definition of “driveway” was revised to address an editorial error. The intention was that a driveway could serve up to 2 parcels with no more than 2 residential units on each parcel and any number of Utility or Miscellaneous Group U structures on each parcel, but due to errors this was not clear and resulted in confusion amongst the regulated public. The definition was revised to specify that those non-commercial and non-industrial Group U structures are allowed on parcel served by a Driveway, but any

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commercial or industrial use cannot be served by a Driveway. It is necessary to specify this because the standards for Driveways are not as strict as the standards for Roads, and in order to accommodate the larger commercial vehicles and the number of employee and visitor vehicles that travel to and from commercial or industrial uses, the stricter Road standards must be applied.

The definition for “distance measurement,” while offering important information regarding the application of these regulations, is a standard and not a definition. The term “distance measurement” is not used in these regulations except in this section, so it is not necessary to include it as a defined term. The language in this defined term was moved to a new section, § 1270.07.

The definition for the term “exception” was revised to specify that an alternative method to a specified standard is still required to achieve the fire safety intent of the standard, rather than provide for a complete exception from the standard entirely. This is necessary to specify that an exception must still provide for fire safety even if it must be achieved by an alternative method rather than the specified standard. This definition is further necessary to prevent instances where someone might use the exceptions process to avoid having to comply with a standard entirely, and thus reducing fire safety.

A definition for the term “Existing Road” was added because these regulations specify different standards for new roads and existing roads. It is necessary to define “existing roads” as those that are physically constructed and used by vehicles prior to any development proposal because roads that are physically constructed, rather than theoretical roads that are included as part of a development proposal, have different limitations on the kinds of improvements that can be made to them to improve their fire safety. A road that is part of a development proposal, but not yet physically constructed, has greater flexibility to comply with the standards in this Subchapter. This definition is necessary for clarity regarding when a road is considered “existing,” rather than a “new” road.

A definition for “Fire Apparatus” was added to identify the vehicles used by the local fire authorities to respond to fire emergencies. A definition for fire apparatus was necessary to distinguish this type of vehicle from other vehicles. Fire Apparatus vary by local fire authority, based on local conditions and needs. Due to the variation, this general term is necessary to describe these vehicles.

A definition for “Fire Authority” was added to identify situations where a fire department, agency, division, district, or other governmental body has responsibility for regulating and/or enforcing minimum fire safety standards. This definition was necessary to distinguish a fire authority from a Local Jurisdiction to avoid confusion. While the Local Jurisdiction has the authority to approve or otherwise regulate Development, in some instances it is necessary for a Development standard to be specified by someone with specific expertise in firefighting, such as the municipal water supply requirements in § 1275.04.

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The existing definition for “hydrant” was revised by adding the word “fire” in front of “hydrant” for clarification. The requirement for the outlet sizes on the hydrant head was also removed. Fire hydrants have different requirements for outlet sizes, and fire apparatus carry couplings and adapters to attach hoses of different sizes to the different sized outlets they may encounter on a fire hydrant. The requirement for male American National Fire Hose Screw Threads (NH) was deleted because this requirement is addressed under §1275.04(b). This change to the definition allows for the variability in fire hydrant specifications used by individual jurisdictions. The definition of “fire hydrant” was also revised to specify this term was inclusive of “hydrant head” and “fire valve” in order to reduce confusion. “Fire valve” was already an existing term that cross-referenced the definition of “fire hydrant,” so the specific definition for “fire valve” was deleted.

A definition for “Fuel Break” was added and modifies the previous term “fuel modification area,” which has been deleted. The use of the term “Fuel Break” in the new definition aligns with a term that is commonly used by fire management professionals. The term not only identifies a spatial area on the landscape, but also infers the condition of the spatial area as providing some level of a “break” in fuel conditions. As PRC 4290(a)(4) and (b) require the Board to regulate fuel breaks, a definition is necessary to establish what a fuel break is and what its purposes are. This provides clarity to the regulated public regarding the fuel break standards in Article 5 in this Subchapter.

The term “fuel modification area” was deleted, as the term is no longer used in these regulations.

The definition of “Greenbelts” revised the previous definition. The updated definition more closely aligns with how the term is used in local land use planning contexts and removes uses that are traditionally not included in greenbelts, such as parking lots. The definition is also modified to remove the assumption that greenbelts will slow or resist the spread of fire, as specific vegetative conditions must be met in order for fire behavior to change. This definition reflects a general understanding within the regulated public on greenbelts. These amendments have been made to clarify the definition of this term throughout the regulations.

A definition of “Greenways” was added to recognize the distinction between “greenbelts” and “greenways” in the context of land uses and fuel management. A greenway is an area within a community, whereas a greenbelt is an area that surrounds a community, making two distinct definitions for these terms necessary. Adding greenways reflects amendments to the regulations which now includes this term.

The definition of “Hammerhead/T” was revised to replace the term “emergency equipment” with the defined term “Fire Apparatus,” which is necessary to add clarity to this definition and to the standards for Hammerhead/T turnarounds in § 1273.10.

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A definition for “Hazardous Land Use” was added to describe the type of land use that could present a significantly elevated potential for the ignition, prolonged duration, or increased intensity of a wildfire due to the presence of certain materials or conditions. This definition helps distinguish between this type of use, which may require additional consideration during the planning and review process, from other types of land uses that do not pose the same concerns for wildfire.

The definition for “Local Jurisdiction” was revised because the current definition was too specific, and did not necessarily capture the full breadth of local agencies that may be the appropriate governmental body to implement and enforce these regulations. By specifying the defined term “development” instead of the existing language (“...issues or approves building permits, use permits, tentative maps or tentative parcel maps, or has authority to regulate development and construction activity....”), this broad definition ensures that all locally relevant governmental bodies or agencies are granted the appropriate authority to ensure compliance with these standards. This is necessary to improve compliance with these regulations and reduce confusion.

A definition for “Local Responsibility Area” was added because these regulations are applicable to VHFHSZs in the LRA. The definition for Local Responsibility Area references the section of Public Resources Code that requires the Board determine where in the state CAL FIRE has the financial responsibility to prevent and suppress wildfires, and fire prevention and suppression in the other areas in the state are the responsibility of either local or federal agencies, as the case may be (PRC 4125(a)). This definition specifies that the Local Responsibility Area is those areas of the state where the financial responsibility of preventing and suppressing wildfires is that of a local government, rather than the federal or state government. This definition is necessary to provide clarity relating to where in the state these standards are applicable.

A definition for “Local Road” was added to provide clarity to the regulated public. In Title 23 of the Code of Federal Regulations § 470.105, the Federal Highway Administration requires local government to classify roads in their jurisdictions based on their functionalities, and provides criteria and guidance for doing so in “Highway Functional Classification Concepts, Criteria, and Procedures,” 2013 Edition, which is incorporated by reference into these regulations. This term is necessary because these regulations include standards for when an existing road needs to be improved for fire safety, and so it was necessary to determine how many, or what distance, or what types of roads would need to be improved to the standards in this Subchapter. Since local roads are typically narrower and thus less likely than collector roads, arterials, or highways and freeways to meet the road width standards for fire safety in this Subchapter, it would be most effective for fire safety to require improvements to this type of road. Other alternatives, such as requiring existing roads within a certain distance of a building to meet fire safety standards, were determined to be arbitrary and lacking in a connection to fire safety. Defining “local roads” requires road improvements only to those roads most likely to cause life safety issues during a wildfire.

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A definition for “Municipal-Type Water System” was added to provide greater clarity regarding the regulated water systems in §§ 1275.01 and 1275.04. This is the same definition used in the NFPA 1142 Standard on Water Supplies for Suburban and Rural Fire Fighting, 2017 Edition - Chapter 3 Definitions, section 3.3.16, a document incorporated by reference into these regulations. This is a well-known “model code” standard frequently used by fire authorities to determine the requirements for water supply systems. This definition is intended to describe all water systems that are designed similarly to what would be designed by a local municipality. In the context of this document, it is necessary to delineate a “municipal-type water system” from alternative water supply systems that may be used. This is a necessary delineation because “municipal-type water systems” represent the desired standard for water supply reliability and consistency, while all other “alternative water supply systems” are installed with the intent of meeting the capabilities of the municipal-type systems, but they have known potential reliability limitations that, under certain circumstances, may not meet the same capabilities as a municipal-type water system.

The definitions for “occupancy” and “one-way road” are unchanged from their existing definitions.

The proposed action defines “perimeter” as the boundary of an individual parcel, and/or the boundary of a tentative and final map, or parcel map. The definition distinguishes these two boundaries (of a parcel and of a map) because those are the typical land use planning tools by which local governments regulate the design and construction of buildings, structures, and subdivisions that may be subject to this Subchapter. This amendment is necessary in order to clarify the applicability of these regulations with regard to the term as used within PRC 4290(a) and is necessary in order to provide a scope by which to implement and enforce the regulations.

The definition for “residential unit” was revised to reflect corrected cross-references.

A definition for “Ridgeline” was added to define this term based on PRC 4290(b), which requires the Fire Safe Regulations include measures to preserve undeveloped ridgelines to reduce fire risk and improve fire protection, and, by regulation, define the term ridgeline for the purposes of this requirement. This definition is necessary to clarify what constitutes a ridgeline pursuant to PRC 4290(s) and is necessary in order to implement and enforce the regulations.

The phrase “Includes public and private streets and lanes” was deleted from the definition of Roads because none of those terms are used in these regulations, and so including them in the definition of “Road” was unnecessary. However, the phrase “public or private” was moved to the beginning of the definition, and the term “access” was replaced with “pathway.” This provides clarity regarding the application of these standards to both public and private roads, and also reduces any confusion with the defined term Access.

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The definition for “Road or Driveway Structures” was not changed from its existing definition.

The term “Same Practical Effect” was deleted. This is necessary because this term was confusing and is no longer used in these regulations.

The definition of “shoulder” was revised to replace the term “access” with “pathway.” Since “access” is now a defined term in these regulations, and is not being used here in congruence with its definition, it is necessary to replace it with “pathway” to avoid confusion.

The definitions of “State Responsibility Area” is unchanged from its existing definition.

The definition of “structure” was revised to delete “an edifice.” Since an edifice is a particularly large building, and the definition of “structure” already references “a building of any kind,” including the word edifice in this definition was redundant.

The definition of “Subdivision” was deleted because the term is no longer used in these regulations.

A definition for “substantial compliance” clarifies the meaning of the term “Substantial Compliance” as it is used in these regulations, specifically § 1270.06 Exceptions to Standards. This term would likely be ascribed different meanings if not defined, thus leading to differing and inconsistent application of the regulations and the grant or denial of exceptions to the standards in the regulations. The purpose of including this definition is to ensure that the term’s meaning is understood and applied consistently in these regulations. This is necessary to provide clarity as to its meaning and to ensure consistent interpretation and implementation of the regulations.

A definition for “substantial evidence” clarifies the meaning of the term “Substantial Evidence” as it is used in these regulations, specifically § 1270.06 Exceptions to Standards. This term would likely be ascribed different meanings if not defined, thus leading to differing and inconsistent application of the regulations and the grant or denial of exceptions to the standards in the regulations. The purpose of including this definition is to ensure that the term’s meaning is understood and applied consistently in these regulations. This is necessary to provide clarity as to its meaning and to ensure consistent interpretation and implementation of the regulations.

The definition for “traffic lane” is unchanged from its existing definition.

The definition for “turnaround” was revised to specify that a turnaround is a part (“a portion”) of a road or driveway, rather than the entire road or driveway, as the existing definition implies. This provides clarity to the regulated public. The term “emergency equipment” was replaced with the defined term “Fire Apparatus,” which also provides clarity.

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The definition of “turnouts” is unchanged from its existing definition.

A definition of “undeveloped ridgelines” was added in order to provide specificity regarding the Board’s mandate to preserve such ridgelines. Without a definition for “undeveloped ridgelines,” it would be impossible to determine what ridgelines are or are not “undeveloped,” which makes any measures to protect such ridgelines unenforceable. The definition of “undeveloped ridgeline” cross-references the defined term “Buildings” in this Subchapter. This definition is necessary to clarify that ridgelines that have already experienced Building construction does not qualify as an “undeveloped ridgeline” subject to the preservation measures described in these regulations.

The definitions of “Utility and Miscellaneous Group U” is unchanged from its existing definition.

The term “vertical clearance” was revised to include vegetation clearance as part of its specified requirements. The existing definition states “The minimum specified height of a bridge or overhead projection above the road or driveway,” but in the context of these regulations, the term is used to regulate the height of vegetation clearance above a road or driveway. This definition is necessary to clarify that the requirements for vertical clearance in these regulations are applicable to vegetation.

A definition for “Very High Fire Hazard Severity Zone” was added. CAL FIRE maps VHFHSZ in both the LRA and the SRA, so the cross-reference to the requirement in Government Code § 51177(i) to map LRA VHFHSZ, and the definition of VHFHSZ therein, is used to define the term for the purposes of these regulations, and is necessary to implement the full scope of PRC 4290. This provides clarity to the regulated public regarding where these regulations are applicable.

The definition of “wildfire” is unchanged from its existing definition.

### **1270.02. Purpose (formerly “Scope”)**

Because the “Definitions” section was moved to § 1270.01, the language in § 1270.01 was moved to § 1270.02. The substantive changes to this section from the existing language will be discussed here.

In subsection (a), the comma between “building” and “construction” was removed, which is necessary to align the term with the terminology used in PRC 4290. Using the terms “Building construction” and the defined term “Development” here more clearly specifies the types of projects these regulations are applicable to and avoids introducing new, undefined terms into the regulations.

In subsection (b), the term “Building construction” was again used to improve the clarity of these regulations, rather than relying on undefined terms. This also improves consistency between subsections (a) and (b). The phrase “basic emergency access and perimeter wildfire measures” was replaced with the phrase “minimum Wildfire protection

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standards.” This was necessary to avoid conflicts with the defined terms “Access” and “Perimeter,” as well as to avoid confusion between “measures to protect undeveloped ridgelines” with the general standards in this Subchapter related to other regulations. Since the revisions to PRC 4290 require the Board to write regulations that “...shall include measures to preserve undeveloped ridgelines...,” it is necessary to replace the term “measures” throughout this rulemaking with “standards.”

In subsection (c), the term “measures” was replaced with “standards” for the same reason as described in § 1270.02(b) above, and the phrase “fire protection standards” was replaced with “regulations” to avoid duplication and confusion. This subsection was also revised to more accurately state the topics that are regulated in this Subchapter, as SB 901 (2018) added new topics for the Board to address in these regulations. This ensures consistency with statute.

1270.02(d). Adds a statement declaring that limiting Building construction in instances where the minimum Wildfire protection standards are not satisfied reduces the risk of wildfires, which protects the health, safety and welfare of residents, and protects natural resources and the environment. As minimum standards, the Fire Safe Regulations establish a floor for fire safe development in the SRA and LRA VHFHSZ. Implicit in these standards is that Building construction that does not meet the minimum standards will not provide sufficient minimum Wildfire protection for residents, property, or natural resources and the environment and, therefore, would be unsafe. Yet, experience indicates a significant problem of several local jurisdictions approving new development that fails to meet all of the Fire Safe Regulation standards. Similarly, objections raised by local jurisdictions during the informal scoping process preceding this rulemaking focus heavily on concerns that the standards impose unreasonable costs and impair development. The purpose of the added statement is the clarification to regulated parties that the benefits and purpose of the minimum wildfire protection standards cannot be realized through partial compliance with the regulations. Thus, the amendment is necessary to ensure a proper understanding of the scope and purpose of the Fire Safe Regulations that is consistent with PRC § 4290 and to identify and promote the benefits of proper implementation of the minimum Wildfire protection standards.

### **1270.03. Scope (previously called Provisions for Application of These Regulations)**

Because the “Definitions” section was moved to § 1270.01, the language in § 1270.02 was moved to § 1270.03. The substantive changes to this section from the existing language in § 1270.02 will be discussed here.

Subsection (a) was not revised except to capitalize defined terms and revise cross references to other sections in the regulations.

The existing language in subsection (b) is unchanged from the existing regulation except to capitalize defined terms and revise cross references to other sections in the regulations, however two new subsections (b)(1) and (b)(2) were added for additional

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clarity. These sections are necessary, given the newly defined terms Access and Perimeter, to provide greater specificity to the regulated public regarding how to most effectively implement subsection (b), consistent with Opinion of Attorney General No. 92-807, Daniel E. Lungren, Attorney General, March 17, 1993, as referenced herein.

Subsection (c) is an existing exemption from the Fire Safe Regulations which exempts repairs and reconstruction due to wildfires from compliance with these regulations. The phrase “legally constructed residential, commercial, or industrial buildings” in the existing language (§ 1270.02(c)(1) and (2)) is replaced with “Buildings” in this proposed action. This was necessary to provide for situations where a Building was not permitted prior to a wildfire, but is being rebuilt through a Local Jurisdiction’s permitting process. As the previously un-permitted Building is rebuilt to current codes and standards, the overall fire safety of the neighborhood is improved, and it would be overly burdensome to exclude an unpermitted Building from this exemption. This phrase was also removed in § 1270.02(2) for consistency within this section.

This existing exemption in subsection (c) places several caveats on the use of this exemption. Those caveats in existing § 1270.02(c)(1)(A) and (B) have been revised in this proposed action to provide greater flexibility to local jurisdictions in determining any restrictions on rebuilding or repair of buildings after a wildfire. The existing regulations do not allow a repaired or reconstruction building to increase in square footage. This proposed action would allow repairs or reconstruction to increase in square footage or add additional buildings on the site so long as the building and parcel siting and setback requirements in § 1276.01 are still maintained. These conditions maintain fire safety by ensuring that buildings are still spaced apart so that building-to-building ignition is reduced in any subsequent wildfire even if the number of buildings on site are increased or the size of those buildings are increased from what was there previously. It was overly burdensome to prevent local jurisdictions from setting their own requirements for repairs and rebuildings when those requirements are unlikely to materially negatively impact fire safety, and so necessary to revise this requirement.

Subsections (c)(3) and (4) were added to clarify the applicability of the Wildfire exemption. Subsection (c)(3) is necessary to clarify that the exemption in subsection (c) applies only to the reconstruction or repair of a Building due to Wildfire, and it does not affect the extent to which the regulations apply to the reconstruction or repair of a building for other reasons. Similarly, subsection (c)(4) is necessary to clarify that the applicability of this exemption does not affect the legal character, such as whether it is legally constructed, of the Building reconstructed or repaired.

Subsection (d) is also an existing exemption in the Fire Safe Regulations which exempts accessory and junior accessory dwelling units. There are no language changes to this subsection in this proposed action.

The existing language in § 1270.02(e) is deleted in this proposed action. This subsection was confusing and resulted in inconsistent application of these regulations. Although this was a non-exhaustive list of land use activities to which these regulations

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may be applicable, it did not provide enough clarity to the regulated public regarding other activities to which these regulations are applied. It also implied that these regulations are always applicable to the enumerated activities, which may result in these regulations applying to activities that do not materially impact fire safety, which would be an overly burdensome application of these requirements. Deleting this subsection is necessary to provide clarity regarding the scope and application of these regulations.

The existing language in § 1270.02(f) is carried over into this proposed action with some revisions for consistency, clarity, and grammar. The existing language removed the term “EXEMPTION” in front of the subsection and turned this subsection into a full sentence. The term “agricultural” was replaced with the defined term “Agriculture,” for consistency and clarity. The phrase “the management and harvesting of wood products” was rephrased to “the management of timberland and harvesting of forest products” for consistency with terms used in the Board’s regulatory programs under the Forest Practices Act and Rules and to improve their application through clarity.

### **1270.04. Local Ordinances**

Revisions to § 1270.04 are necessary to interpret and make specific PRC 4290(c) - “These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the state.” Greater specificity is required in regulation in order to provide local jurisdictions with the information they need to consistently apply this section of statute within their jurisdiction, and so that the application of this section is consistent between jurisdictions across the state.

Subsection (a) is deleted and replaced with new language that uses more common terms and more accurately reflects the provision of statute it is implementing. This is necessary to provide greater clarity to local jurisdictions and reduce confusion in understanding and interpreting the requirements.

The existing process in subsections (b), (c), and (d) where a local jurisdiction could send their local ordinances to the Board for certification as meeting or exceeding the requirements in the Fire Safe Regulations is deleted in this proposed action. While these subsections were intended to provide a process for which local jurisdictions could receive a certification from the Board that their local requirements met or exceeded the State Minimum Fire Safe Regulations, few local jurisdictions took advantage of this process as it proved to be an overly burdensome process.

The proposed action replaces subsections (b) and (c) with additional specifics to assist local jurisdictions in determining if their local regulation equals or exceeds a minimum

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standard in this Subchapter. This is necessary to establish consistent criteria across the State for local jurisdictions to rely upon when making a determination regarding whether or not a local regulation equals or exceeds the standards in this Subchapter.

New language in subsection (d), and new subsections (e) and (f) is necessary to provide local jurisdictions an opportunity for the Board to review and comment on their proposed local regulations relating to fire safe development. These subsections are not intended to prescribe a procedure or process by which a local jurisdiction shall communicate with the Board regarding their proposed requirement.

A new subsection (g) is necessary to establish that regardless of a local regulation that equals or exceeds the State Minimum Fire Safe Regulations, Building construction must still comply with the requirements in this Subchapter. This is necessary to specify that any local regulation applied to Building construction in addition to the State Minimum Fire Safe Regulations shall ensure that the minimum requirements in these standards are satisfied.

### **1270.05 Inspections**

This section clarifies the inspection authority obligations in the SRA and VHFHSZ. Prior to the amendments to PRC 4290 that expanded the applicability of the Fire Safe Regulations from the SRA to also include the VHFHSZ, the government entity with inspection authority was CAL FIRE, since CAL FIRE has this authority in the SRA. However, because the VHFHSZ is not within the SRA, CAL FIRE lacks inspection authority there. Consistent with PRC 4102 and 4125(a), CAL FIRE has the inspection authority in the SRA, and the Local Jurisdiction has the inspection authority in the VHFHSZ, as the VHFHSZ is in the Local Responsibility Area. The purpose of the amendments in subsections (a) to (d), inclusive, is to clarify which government entity - local or state - has inspection authority in the SRA and VHFHSZ, respectively, and the process by which inspection authority may be delegated by the Director, consistent with the authority provided by statute, thereby eliminating potential confusion as to the proper inspection authority. The amendments to subsections (b)(5) also impose documentation requirements for a delegation of inspection authority from CAL FIRE to the Local Jurisdiction, the purpose of which is promote transparency and clarity as to whether CAL FIRE or the Local Jurisdiction have inspection authority for an area. These amendments are necessary to clarify the applicability of the regulations and to aid in their implementation.

In addition, the amendments to PRC 4290 that expanded the applicability of the Fire Safe Regulations from the SRA to also include the VHFHSZ create other problems with respect to what standards the inspection entity is applying. The Fire Safe Regulations impose the minimum standards for Building Construction in the SRA and VHFHSZ. However, pursuant to PRC 4290(c), Local Jurisdictions have discretion to adopt additional standards that equal or exceed the Board's minimum standards, so long as complying with the local standards also results in compliance with the Board's minimum

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standards, as described in Section 1270.04. This creates a significant problem where a Local Jurisdiction adopts such additional local standards because there is no process by which CAL FIRE is made aware of the adoption or content of those standards that equal or exceed the Board's minimum standards. More to the point, however, CAL FIRE lacks statutory authority to inspect or enforce local ordinances – in either the SRA or VHFHSZ. This means responsibility necessarily must fall to the Local Jurisdiction to inspect and enforce any portion of a local ordinance that exceeds the Board's minimum standards. The purpose of the amendments in subsections (f) and (g) are to clarify that the state's interests in inspection compliance are limited to the state's minimum standards and that the scope of CAL FIRE's jurisdiction does not extend to local ordinances. To the extent a Local Jurisdiction exercises discretion to adopt stricter local standards, then responsibility for inspection and enforcement of standards that exceed the Board's standards must lie exclusively with the Local Jurisdiction. These amendments are necessary to promote clarity as to the scope of CAL FIRE's and the Local Jurisdiction's inspection obligations in situations where the Local Jurisdiction voluntarily imposes heightened local standards that equal or exceed the state's standards.

### **1270.06. Exceptions to Standards**

A new subsection (a) is necessary in this section to specify that the exception process requirements are only applicable to requests for exceptions to the Fire Safe Regulations. The existing language in subsection (a) and the following subsections were re-lettered to reflect the addition of this new language.

Subsection (b) (formerly (a)) was revised for grammar and to reflect defined terms that were added or deleted. This is necessary to maintain congruence with the defined terms to reduce confusion and improve compliance. For ease of reading, the existing language was further divided into sub-subsections. Language was added to specify that exceptions shall only be granted where the exception still provides for "Substantial Compliance with the minimum standards provided in this Subchapter." This is necessary to prevent situations where exceptions are granted which do not provide for an alternative method of conforming with the intention to provide for fire safety in development.

Greater specificity was added to the existing language moved into subsection (b)(2). This additional specificity reflects defined terms and is necessary so that these regulations may provide for a consistent standard for which a local jurisdiction may judge whether or not to grant an exception. Whereas local jurisdictions previously were only required to send any exception approvals to the CAL FIRE unit headquarters that administers SRA fire protection in that local jurisdiction, this proposed action also requires those exception requests to be sent to the Board. This is necessary so the Board can evaluate the frequency of exceptions granted for any given standard and determine if further rulemaking is necessary to further clarify or otherwise amend the standards. Additional changes for clarity ("CAL FIRE unit office" is not as specific as "CAL FIRE unit headquarters") and specificity (CAL FIRE does not administer fire protection in the LRA, and so additional language was necessary to clarify where

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exceptions granted in the LRA should be forwarded) were made to this section. The existing regulations require that these exceptions shall be kept “on file” at the Unit office; greater specificity was added to require that exception shall be kept on file at the Board and Unit offices for a period of no less than five years. Five years provides enough of a historical record to inform future rulemaking activities, but does not burden the Board or CAL FIRE offices with an excessively long retention period.

The existing language in subsection (b), now (c ), is revised for general clarity and to use defined terms. These changes are necessary to establish a consistent statewide process for the regulated public to request and the local jurisdiction to decide on exceptions. Existing subsections (c ) and (d), now combined into one subsection (d), was similarly revised to add greater specificity and clarity. A new requirement that the appeals body consult with the inspection authority was added. This is necessary to ensure that any appeals are decided, on the balance, towards providing for fire safety.

Existing subsection (e) was revised to align with the requirements in earlier subsections in this section and to reflect defined terms. This is necessary to provide clarity to the regulated public and consistency within the rules. The additional information required in the written findings provides the Board and CAL FIRE with additional information regarding exceptions that can be used to determine the necessity, if any, of revising or otherwise clarifying the standards in the Fire Safe Regulations.

### **§ 1273.07 Distance Measurements**

The language in this section was previously in § 1270.10 Definitions (now § 1270.01 Definitions). This language offers important information regarding the application of these regulations, but it is a standard and not a definition. As such, it was necessary to move that language to its own section. This standard is necessary so that any distance measurements contained in these regulations are measured with a consistent method across the state.

### **Article 2. Ingress and Egress (previously called Emergency Access and Egress)**

This title of this Article was changed to remove the term “Emergency” which was redundant with section 14 CCR §1270.02 “Purpose,” which specifies that the purpose of these Fire Safe Regulations shall provide for emergency ingress and access. In addition, the term Access was changed to Ingress to avoid confusion with the definition of Access (14 CCR §1270.01) which applies to Roads, whereas Ingress and Egress refer more broadly to entrances and exits, respectively.

Article 2 was reorganized to align with engineering documents used for Road design such as the “American Association of State and Highway Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets” and the “California Department of Transportation (Caltrans) Highway Design Manual.” The professional engineers working on the update identified that the organization of the regulations was confusing and was not consistent with typical design guidelines published at the federal and state levels. This was confirmed during discussions with the agency staff that the regulations are somewhat difficult to implement due to the organizational nature of

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them. As such, the intent of the reorganization is to assist the regulated public with implementing the regulations by presenting the topics and information consistent with those typical Road design guidelines and which will result in a regulatory scheme which ensures fire safety with regards to building access.

### **1273.00. Purpose and Application (previously called Intent)**

This section name was changed to Purpose and Application to describe the purpose of this article and which provisions apply to reflect the substantive changes made to this section. The intent of Article 2 is set forth in section 14 CCR §1270.02 Purpose, which states these regulations have the purpose of establishing minimum wildfire protection standards.

§1273.00(a) was revised to specify that New Roads, Driveways, and Road or Driveway Structures are subject to regulation under these Fire Safe Regulations, unless exempted in § 1270.03(b)-(e). Further revisions were made for consistency with defined terms and cross references to other standards in these regulations. These revisions were necessary to provide clarity to the regulated public regarding the application of these standards to new versus existing roads.

§1273.00(b) was added to further specify the applicability of this Article. As PRC 4290 requires that “[t]hese regulations apply to the perimeters and access to all residential, commercial, and industrial building construction,” it is necessary to specify when these regulations apply to the Perimeter or Access. This will result in more consistent application of the regulations across the State.

While subsection (b) specifies the application of these regulations to all New Roads, Driveways, and Road and Driveway Structures (shortened here to “New Roads”) as well as to New and Existing Roads, Driveways, and Road and Driveway Structures within the Perimeter of a development, §1273.00(c) was added to further specify the applicability of this Article to Existing Roads, Driveways, and Road and Driveway Structures (shortened here to “Existing Roads”) that provide Access to Building construction. This is necessary to ensure Existing Roads provide for suitable fire safety when development that is increasing the intensity or density of uses along those Existing Roads is approved.

The thresholds established in subsections (c)(1), (2), and (3) are revised from existing language in § 1270.02(e), but given greater specificity to improve clarity. The first subsection, (c)(1), specifies that where Building construction includes the division of land into 3 or more parcels, Existing Roads must meet the standards in this Subchapter. This division into 3 more parcels was selected to reflect the distinction in these regulations between a Driveway and a Road; once a vehicular pathway serves more than 2 parcels, it must meet the stricter Road standards in this Subchapter rather than the Driveway standard. As such, when a parcel is split into 3 or more new parcels, it would be appropriate to evaluate the condition of any Existing Roads providing Access to the parcels, and ensure those Existing Roads provide for adequate fire safety pursuant to this Subchapter.

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The second and third subsections, § 1270.00(c)(2) and (3), provide greater specificity regarding what kinds of zoning changes or use permits require the application of these regulations to Existing Roads. This specificity is necessary so that only those applications for zoning changes and change of use permits that would materially negatively impact fire safety are subject to these regulations. This provides clarity to regulated public, will result in the consistent application of these regulations statewide, and reduces regulatory burdens on proposed Building construction or development that is not anticipated to materially negatively impact fire safety.

§1273.00(d) is added to these regulations for clarity regarding the application of the standards in § 1273.12, Standards for Existing Roads. This requirement specifies that Building construction is prohibited where any Existing Road does not meet the standards in that section. This is necessary to provide for consistent statewide minimum standards for all development regardless of size, intensity, or type.

### **1273.01. Horizontal and Vertical Curves / Curb Radii (previously called Width)**

The title of this section was changed to reflect its new contents consistent with the reorganization of this Article described above. Specifically, Width typically relates to only the travel lane Width; whereas, the updated title includes the additional attributes of the travelway that are included in the regulations. This was related to the reorganization of the section and the contents it covers within.

§1273.01(a) moves the existing requirement in 1273.04(a) to this section and adds an exception for subsections §1273.01(b), (c), and (d). The need for adding these exceptions allows for circumstances where an alternative standard may be acceptable, as further described below. This section also added a specification on the measurement of the horizontal inside radius of curvature to be to be measured from the centerline of the inside lane. This measurement was necessary to establish a consistent means of measuring the horizontal curvature; without this specification different local jurisdictions were interpreting where to measure the horizontal curvature in different ways (some measuring it from the centerline of the inside travel lane, others from the shoulder stripe).

§1273.01(a)(1) moves the existing requirement in §1273.04(a), which requires an additional surface width of four feet to curves of 50-100 feet radius, and adds a cross-reference to § 1273.05 (Road and Driveway Width and Horizontal Clearances) to clarify the applicability of this width requirement. This cross-reference is necessary to add clarity regarding to what additional surface width this four feet is applied to. In general, these amendments are necessary in order to ensure clear implementation of this provision and fire safe standards for roads.

§1273.01(a)(2) moves and revises the existing requirement in §1273.04(a), which requires an additional surface width to curves of 100-200 feet radius. The requirement for additional surface width for horizontal curvatures of 100-200 feet was reduced from two feet to one foot based on the turning templates of Fire Apparatus utilized to test the

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appropriateness of the curvature. Use of turning templates from the AutoTURN software program is considered state-of-the-practice for testing geometric features to ensure design vehicles can navigate turns appropriately. AutoTURN incorporates a factor of safety related to vehicle turning performance when it comes to verifying navigation, which is also appropriate for testing. The Fire Chiefs Working Group provided specifications related to Fire Apparatus vehicles that were used in their districts and those specifications were used to develop a custom turning template that was used in the assessment (representing a typical Fire Apparatus). Figures 1 and 2 are included in this proposed rulemaking to show the turning template results and demonstrating the intent of this regulation. This is necessary to provide clarity to the regulated public regarding the implementation of these requirements to improve compliance. These modifications reflect needs for actual Fire Apparatus used by CAL FIRE and resulted in slightly reducing the horizontal curvature requirements which were incorporated into the standards while verifying that emergency accessibility is maintained.

§1273.01(a)(3) This paragraph was added to specify that flexible posts may be placed within the horizontal curvature requirement. Many local jurisdictions desire to implement road networks that allow for alternative transportation modes that reduce greenhouse gas emissions. Flexible posts create protected spaces for these alternate transportation options, such as bike lanes or transit stops, without materially impacting the overall fire safety of the Road. This specificity is necessary in order to provide flexibility to local jurisdictions as they endeavor to simultaneously provide for concurrent ingress and egress, pursuant to the standards in this Subchapter, as well as reduce the climate impacts associated with greenhouse gas emissions. This specificity provides greater clarity to local jurisdictions regarding their ability to permit such flexible posts, clarity which does not exist in the existing regulations.

§1273.01(b) This subsection was added to provide an alternative standard to that specified in §1273.01(a) which may be applied on roads that require vehicles to operate at slow speeds. This modification does not reduce existing regulations but it does provide an alternative for a single, specific condition where a Road may not otherwise meet the requirements in § 1273.01(a). Compliance with this alternative requires verification and design by a Professional Engineer, including demonstration that the alternative radius is navigable by Fire Apparatus. This is necessary to ensure appropriate application of an alternative method and achieve increased flexibility for the implementation of these regulations.

§1273.01(c) This subsection was added to provide a requirement for effective turning radius for situations where on-street parking, bike lanes, smaller curb radii, or curb extensions to minimize pedestrian exposure and collision severity are provided. Subsection (d) was added to provide an alternative standard to that of §1273.01(a) on intersections without on-street parking and/or bike lanes with certain vehicle and traffic volume requirements. These modifications provide clarity that these multi-modal transit facilities can be provided for on a Road while maintaining fire safety-related accessibility as long as the effective turning radius is provided. This section is necessary because the existing regulations do not account for streets with parking

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and/or bicycle facilities or other street features, which are growing in popularity as local jurisdictions design road networks that accommodate a greater variety of transportation options. Figures 3 and 4 were added to improve clarity of this regulation through a visual representation and aid in the implementation of this provision.

§1273.01(e) This language has been moved and renumbered from §1273.04(b) to support the general reorganization of these regulations. Please see the discussion under the Article 2 header for the necessity and purpose for reorganizing this Article.

### **1273.02. Road and Driveway Surfaces**

§1273.02 was renamed to “Road and Driveway Surfaces” from “Road Surfaces” to reflect that the standards and regulations contained within are applicable to both Roads and Driveways, which is necessary to improve the accuracy and clarity of the regulations.

§1273.02 (a) This subsection was modified to remove the words “be designed and maintained” which were redundant with the requirements as stated in §1273.02 (a). This section also removed the words “at least” when describing the minimum imposed load of Fire Apparatus for language consistency within the document. Additionally, the words “and provide an aggregate base” were removed from the standard since there are a variety of ways to ensure that the Road meets the weight and slippage requirements without an aggregate base. The standard was modified to provide additional treatments that can be provided on the Road, including binding agents, gravel, lime slurry, or pavement, as long as it can support the required weights at all times including during saturation and is non-erodible, which are necessary elements to ensure long-term fire-safe accessibility for Roads. The potential surface treatments provide a non-exhaustive list which identifies some of the professionally utilized materials, as well as research provided identifying the applicability of treatments like lime slurry as a potentially appropriate surface treatment.

§1273.02 (b) This subsection was added to provide a minimum weight standard for Driveways and Road and Driveway Structures, which is a lower weight requirement than that identified in §1273.02(a). The minimum weight requirement was reduced from 40,000 pounds to 36,000 pounds based on information received from the Fire Chiefs Working Group that a Cal Fire Model 34 engine, the type of engine most likely to respond to emergency incidents in areas subject to these regulations, weighs no more than 36,000 pounds and, if those are the appropriate response vehicles, roads should be designed accordingly. These changes make the regulations easier to implement in those specific cases while maintaining a regulatory scheme which promotes fire safe access to buildings.

§1273.02 (c) This subsection updates §1273.02(c) by adding the word “The” before “project proponent” for consistency with how the term is used throughout. The words “certified engineered” replaces the term “engineering” to more explicitly describe specifications that must meet a recognized standard. The words “the Road” were added to specify that the Road design must meet the certified engineered specifications, if

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requested. The words “authority having” were removed to change the reference from local authority having jurisdiction to Local Jurisdiction consistent with defined terms.

### **1273.03. Bridge or Elevated Structures on Roads and Driveways (previously called Grades)**

The title of this section was changed to reflect its new contents.

§1273.03 (a) This subsection is a renumbering and update of existing requirements in §1273.07(a) to add a more specific reference to Article 3, which is necessary to ensure that signing is consistently applied to each bridge or elevated structure to reflect their weight, vertical clearance limitations, and other traffic conditions that are important for emergency responders to be made aware of during wildfires. This information is useful due to the number of different Fire Apparatus that may vary in type, size, and weight that are responding from out of the local area to a wildfire. Any limitations on a bridge or elevated structure must be made visible so emergency responders can determine if they can safely access an area.

§1273.03 (b) This subsection renumbers and amends existing requirements in §1273.07(b). This proposed action requires that any bridge or elevated structure be designed and constructed to support a gross vehicle weight rating of 75,000 pounds and that vehicle load limits must be posted at both entrances to a bridge. This update was necessary to add consistency with the Road requirement which also specifies that Roads shall support Fire Apparatus weighing 75,000 pounds. These revisions eliminated a requirement that bridges be maintained to this standard as well; as these regulations are applicable to Building construction and related Development, it is outside the scope of these regulations to place specific requirements on the maintenance of bridges or other structures when maintenance may not necessarily be related to such construction. Replacing the reference to the AASHTO HB-17 standard was replaced with this specific numerical threshold in response to comments received from the Fire Chiefs Working Group noting that this standard makes it easier to determine whether a proposed design meets the requirements of this section. Relying on a standard for gross vehicle weight in this section is also more consistent with other weight requirements referenced in Article 2 (such as Road and Driveway requirements). This provides additional consistency for determining compliance during the plan review process and clarity for emergency response vehicles, or any vehicles, that may have to access these features.

§1273.03 (b)(1) This paragraph was added to provide an alternative minimum standard in situations where the maximum weight of a fire apparatus responding to an emergency event would be lower than 75,000 pounds. In that specific instance, the Bridge or Elevated Structure could be designed to a lower weight requirement without affecting the ability for Fire Apparatus to traverse it. This amendment clarifies the requirements for a reduction in support capacity, and is necessary in order to increase the flexibility of implementation of these regulations while still maintaining fire safety.

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§1273.03 (b)(2) This paragraph updates §1273.02(b) by reducing the allowable minimum weight requirement from 40,000 pounds to 36,000 pounds. This reduction was based on the fact that the Cal Fire Model 34 engine weighs no more than 36,000 pounds, as well as information received from the Fire Chiefs Working Group that those would be the most likely apparatus to respond to emergency incidents within the geographic scope of these regulations and, if those are the appropriate response vehicles, roads should be designed accordingly. This section also adds a requirement in cases where a lower weight is accommodated for signing as required in Article 3. This was added for consistency in providing information to responding personnel so they are aware of the bridge weight design capabilities. These signing requirements are revised to be made compulsory, rather than discretionary on the part of the jurisdiction having authority, in order to promote safety and clarity of bridge and access capacity.

§1273.03 (b)(3) This paragraph further revises the existing language in §1273.07 regarding the application of AASHTO structure design standards. The proposed amendment clarifies that these standards may be applied in lieu of the vehicle weight requirements in §1273.03 so long as those features are designed and certified by a professional engineer, as described. The amendment eliminates existing language regarding design requirements related to live loads of fire apparatus in favor of the revised regulations which promote flexibility in implementation while still maintaining professional accountability of the safety of access.

§1273.03 (c) This section revises §1273.07(c) but replaces the words “emergency vehicle” with “Fire Apparatus” for consistency throughout these regulations. This section also removes the words “or both” and replaces it with “and/or other distinguishing features” to allow for other acceptable features that may not otherwise be stated in the provisions but would be acceptable to the Local Jurisdiction.

§1273.03 (d) This subsection renumbers and revises existing language in §1273.07(d) by adding the words “or elevated structure” for consistency with this section and revises the first sentence for clarity. Additionally, a provision was added to reference that bridges or elevated structures must meet the Road width and height requirements outlined in §1273.05 for consistency of standards and to ensure the safety of the access. This avoids situations where Fire Apparatus may unexpectedly encounter a situation where the bridge width is narrower than a road and limits safe ingress or egress under emergency situations. Furthermore, the proposed amendment replaces discretionary authority of authorization of such a one-lane bridge with the above described prescriptive requirement. The purpose of this amendment is to provide additional clarity and consistency of application of the regulations.

§1273.03 (e) The subsection requires that bridges and elevated structures be made of non-combustible material to reduce the likelihood that the bridge would burn in a fire event. The purpose of this amendment is to ensure the integrity of bridges during a fire event. This modification does change the potential material required when building a bridge or elevated structure but will improve safety for emergency responders and evacuating civilians by ensuring that the bridge does not burn during a wildfire event.

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The existing language in § 1273.03, regarding Grades, has been moved to § 1273.04. Please see purpose and necessity for this reorganization under the header for Article 2.

### **1273.04. Road and Driveway Grades (previously called Radius)**

The title of this section was changed to reflect its new contents. The existing contents of this section was moved to § 1273.01. Please see purpose and necessity statements for this reorganization under the Article 2 header.

§1273.04(a) This subsection reworded the existing provision in §1273.03(a) to improve clarity. This does not change the requirement that all Roads and Driveways shall not exceed 16 percent.

§1273.04(b) This subsection revised §1273.03(b) by replacing language that allowed mitigations of the same practical effect with approval from the local authority on grades between 16% and 20% with a more specific requirement to prevent slippage and scraping through treatments such as aggregate treatments, binding agents, and/or paving. This requirement provides clarity of when these slopes may be allowed and is necessary so that Fire Apparatus can safely traverse a Road without slippage, which would result in a dangerous situation for firefighters in the Fire Apparatus and any other vehicles on the Road.

§1273.04(c) This subsection was added to require that grade transitions be constructed and designed to accommodate maximum approach and departure angles of 12 degrees. This was based on vehicle specifications provided by the Fire Chiefs Working Group representing a typical Fire Apparatus which was used to verify the approach and departure angle requirements. The Fire Apparatus represents a Type 1 engine used by each fire district, which would be the likeliest to respond/apparatus with the shallowest maximum approach angle capacity. This amendment is necessary to ensure adequate safe access for such apparatus.

### **1273.05. Road and Driveway Width and Horizontal Clearances (previously called Turnarounds)**

The title of this section was changed to reflect its new contents. The existing language in this section was moved to § 1273.10. The purposes and necessity for this reorganization is discussed under the Article 2 header.

§1273.05(a) This subsection restructured and revised §1273.01(a) by adding the word "Bidirectional" before Roads to specify applicability of the stated width requirement to a road that has traffic flow in two directions without a median. This is necessary to specify because there are different width requirements for different types of roads. The specific standard of two 10 foot traffic lanes, excluding shoulders and striping, is unchanged from existing regulations.

§1273.05(a) is amended to include a provision requiring that on bidirectional roads with non-adjacent Traffic Lanes, each Traffic Lane shall provide a minimum width of twelve

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feet. This amendment is necessary to add clarity regarding the width requirements for non-adjacent bidirectional roads. To ensure these particular roads provide for adequate fire safety, the standard proposed here requires these roads have the same widths as functionally similar unidirectional roads. These clarifications were added to account for topographic areas (such as the side of a hill or around an environmental resource) that do not allow for bidirectional travel lanes to be adjacent to one another. The existing language in this section regarding required Vertical Clearance was moved to its own section, § 1273.06.

§1273.05(b) This subsection revises this existing language in §1273.01(b), (b)(1), and (b)(2) to provide greater clarity regarding the standards for one-way roads. Subsection (b) is retained in § 1273.05(b), but the provision specifically allowing local jurisdictions to approve one-way roads has been deleted. That provision was unnecessarily redundant, as the local jurisdiction is already provided the authority to approve such roads in these regulations. The requirement for a 12 foot traffic lane on one-way roads was further revised to delete the specification that the 12-foot Traffic Lane exclude any Shoulders. That requirement is unnecessary because a new, stricter requirement in subsection (c ), discussed below, addresses additional width requirements for one-way roads. The requirements in subsection (b)(2) were moved to § 1273.07 and § 1273.09.

§1273.05(c) This adds a minimum Clear Width requirement for Bidirectional Roads with a center median and One-way Roads of 20 feet consistent with the existing regulatory requirement for bidirectional roads without a center median. This is necessary to ensure that in instances where a Road may only provide one Traffic Lane, sufficient Clear Width is provided for to ensure concurrent ingress and egress during a wildfire as is provided for on bidirectional roads with two lanes.

§1273.05(d) This subsection moved existing language regarding the width and Clear Width requirements for driveways from §1273.01(c) to this section. The standards in this section remain the same, but the phrase “unobstructed horizontal clearance” was replaced with the defined term “Clear Width” and Vertical Clearance was capitalized for consistency with the defined term.

### **§1273.06 Road and Driveway Vertical Clearances**

The existing language in this section was moved to § 1273.09. Please see the purpose and necessity for this reorganization under the Article 2 header.

This section moved current requirements for vertical clearance for driveways in existing §1273.01(c) to this section and expanded the requirements to apply to Roads as well. This establishes a consistent set of minimum requirements for vertical clearance such that Fire Apparatus can safely access an area through improved visibility and removal of any physical obstructions such as vegetation.

### **§1273.07 Maximum Lengths of New One-Way Roads**

The existing language in this section was moved to § 1273.03. Please see the purpose and necessity for this reorganization under the Article 2 header.

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§1273.07(a) moved the requirements of the current §1273.01(b)(2) to this section and added the word “New” before “One-Way Road” to specify the applicability of this provision which is necessary to ensure that future road construction conform to safe access standards, and to specify that this requirement does not apply to Existing One-way Roads.

### **§1273.08 Maximum Lengths of New Dead-end Roads**

This section was revised to include use of the term “New” throughout to ensure that the requirements identified here only apply to New Dead-end Roads and not Existing Dead-end Roads.

§1273.08(a) The proposed action eliminates redundant language regarding how the maximum length of a dead-end road is to be determined in favor of use of existing language which simply identifies maximum cumulative length. The purpose of this amendment is to simplify the determination of length and is necessary in order to improve implementation and enforcement of the regulations.

§1273.08(a)(1), (2), and (3) These paragraphs modified the existing requirement for dead-end roads from 5 acres to 19.99 acres to 5 acres or larger. This modifies the regulation to reduce the maximum length of New Dead-end Roads from 5,280 feet (or one mile) to 2,640 feet (or half a mile). Survey information received from the Fire Chiefs Working Group noted concerns for the maximum lengths of the Dead-end Roads and suggesting shortening the maximum allowable lengths for Dead-end Roads would provide for greater fire safety than the current standards. Additionally, when completing an on-line search for the maximum length of a Dead-end Road allowed throughout the country, it was difficult to identify any standard that allowed roads longer than ½ mile in length, and most agencies’ maximum allowable lengths were less. The practical effect of this change is that the maximum allowable length of New Dead-end Roads serving parcels larger than 20 acres is reduced from 5,280 feet to 2,640 feet. This requirement does not affect Existing Dead-end Roads which are longer than 2,640. Additional revisions were made to § 1273.08(a)(1)-(3) for grammar and clarity.

Furthermore, the un-numbered language following paragraphs (1)-(3) has been restructured and revised into §1273.08(e) and (f). Please see discussions of those subsections below for additional information.

§1273.08(b) is revised to update citation for Turnaround requirements in §1273.10, and revised for grammar and clarity.

§1273.08(c) clarifies that existing width requirements in §1273.05 are applicable to new Dead-end Roads, which is necessary to ensure consistent implementation of the Road Width requirements.

§1273.08(d) This is a new subsection stating that new Dead-end roads must be connected to through roads on both ends. This was necessary to prevent piece-mealing

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Dead-end Roads together which would otherwise result in a cumulative length exceeding the maximum length standards (or, in essence, piecing together a collection of ½ mile Dead-end Roads that would dramatically exceed the maximum length requirement and make it more difficult to access/egress from those areas during a wildfire event). Although existing language in this section was intended to prevent that from occurring (“The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths...”), in practice this language was confusing and did not result in the intended outcome. Replacing that existing requirement with the proposal here is necessary to prevent Dead-End Roads from exceeding the fire safety standards in this Subchapter.

§1273.08(e) This is a new subsection that specifies how to measure a Dead-end Road (centerline of the through roadway to the farthest point of the Dead-end Road). This clarification was necessary to provide uniformity and consistency in how Dead-end Roads are measured.

§1273.08(f) This provision remains from the original regulation in the unnumbered provision following paragraphs (a)(1) through (a)(3) with the clarification that that the provision was applicable where a dead end road provides access to differing zoned parcel sizes, rather than crossing over those differing zoned parcel sizes, and is necessary given that some roads may not cross differing parcel zones, but that fire safe access is dependent on the service provided by the road, rather than the location of the road itself. Additionally, it was given a separate subsection for consistency in formatting within the regulation.

### **§1273.09 Road and Driveway Turnouts**

The existing language in this section was moved to § 1273.11. Please see the purpose and necessity for this reorganization under the header for Article 2.

§1273.09(a) revises the existing Turnout requirements in §1273.06 by shortening the length of a Turnout from 30 feet in length to 22 feet and requiring that turnouts be facilitated outside of the Traffic Lane to accommodate one passenger vehicle. This revision was based on an analysis of turning templates using the AutoTURN software which is considered state of the practice for testing geometric appropriateness of road feature design. The requirements were developed assuming a passenger car as the design vehicle which is consistent with direction received from the Fire Chiefs Working Group to improve flexibility in implementation of the regulations while maintaining safe access requirements. Figure 5 was added to show the dimension and the turning template to provide additional details and visual clarification and representation of the requirement. This modification makes implementation of the regulation easier as the design has been reduced by eight feet reflecting the results of the technical analysis.

§1273.09(b) modifies the existing requirement in §1273.01(b)(2) by specifying that One-way Roads and Dead-end Roads over 400 feet in length shall have a Turnout located at approximately the midpoint of the Road, in addition to any other Turnouts required. Existing requirements in § 1273.01(b)(2) specify that a turnout shall be constructed at

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the midpoint of each One-Way Road, but that requirement was revised here to only require turnouts at the midpoint of One-way Roads that exceed 400 feet. Requiring turnouts on One-way Roads less than 400 feet in length was overly burdensome and did not provide a specific fire safety advantage over requiring a turnout on one-way roads over 400 feet. A requirement for turnouts at the midpoint of Dead-end Roads over 400 feet in length was added to this section to provide additional safe areas for Fire Apparatus and civilian vehicles to pass each other during a Wildfire evacuation. This 400 foot distance requirement was an extant requirement for driveway turnouts in §1273.05(c) (revised to in §1273.09(f)) and is appropriate and suitable here as a prescriptive requirement for One-way and Dead-end roads given the potentially design characteristics of both types of accessible surface.

§1273.09(c) Since One-way Roads have a narrower width requirement than bi-directional roads, it was necessary to specify additional turnout requirements for one-way roads, or for other Roads which do not meet the width requirements in this Subchapter, such as through an exception provided by §1270.06. This is necessary to provide for adequate opportunities for vehicles to pass each other on one-way roads despite the narrower width allowances or other Roads that may be narrower than the standards in § 1273.05 in order to maintain safe fire access in those situations.

§1273.09(d) This section modified the existing requirement in 1273.05(c) to specify that driveways that are less than 20 feet wide and greater than 150 feet in length are required to have a Turnout. Previously, all driveways independent of width required a turnout; but Driveways that are at least 20 feet in width provide sufficient space for a Fire Apparatus to pass a vehicle in the Driveway. This revision is necessary for the consistent application of these requirements.

§1273.09(e) This section renumbers a portion of existing 1273.05(c) in the current regulations; the location requirement was broken into its own sub-heading for consistency in regulation formatting.

§1273.09(f) This section renumbers a portion of existing 1273.05(c) in the current regulations; the spacing requirement was broken into its own sub-heading for consistency in regulation formatting.

### **§1273.10 Road and Driveway Turnarounds**

§1273.10(a) revised a portion of the existing regulation §1273.05(d), regarding Turnarounds on Dead-end Roads. The second sentence was modified from “Turnarounds shall be provided at a maximum of 1,320 foot intervals” to “a Turnaround should be provided halfway along the Dead-end Road” for parcels 5 acres or larger.” This revision reflects the updated standard for the maximum length of a dead-end road, which was shortened to 2,640 feet. This revision does not substantively alter the maximum interval at which a turnaround must be provided on a Dead-end road.

§1273.10(b) moves the existing requirement in § 1273.05(d), regarding Turnarounds on Driveways, to this section. No changes were made to the requirements in this section.

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§1273.10(c) specifies a Turnaround must meet the requirements of one of three new figures (Figures 6.1, 6.2, and 6.3). These figures were added to depict three different turning radii (40-foot, 35-foot, and 30-foot radius) of a Turnaround. This is necessary to provide greater specificity and clarity regarding the Turnaround requirements and how they shall be applied. These standards replace those of existing 1273.05(b), the repeal of which was necessary to implement the improved clarity of the described provisions.

§1273.10(d) was added to provide for an alternative where physical constraints prohibit the use of a 40-foot Turnaround. Figures 6.2 and 6.3 depict how a Type 1 Fire Apparatus could negotiate the turnaround in those instances. This would be allowed in specific instances when there was a geometric constraint due to terrain, Road size/width, or other environmental features that would not make the provision of a 40-foot Turnaround possible. This amendment is necessary in order to improve the flexibility of implementation of these regulations.

§1273.10(e) was added to require that a Turnaround remain clear of vegetation or decorative elements. This requirement is necessary to ensure that a Turnaround which allows vehicles or a Fire Apparatus to safely turn around in an area is not compromised by an obstruction or visual limitation. This addition is also necessary in order to provide that adequate accessibility is maintained.

§1273.10(f) moves the second sentence in the existing requirement in 1273.05(b) to this section. There are no changes to this language otherwise.

The existing Figures A and B (within 1273.05(e) and (f)) have been repealed in favor of the clarity provided by figures 6.1, 6.2, and 6.3. Please see discussion of 1273.10(c) for additional details.

### **§1273.11. Gates**

§1273.11(a) revises existing language in §1273.09(d) and moves it to this section (please see the purpose and necessity statements for this reorganization under the Article 2 header). The proposed action uses the term “gates” consistently in place of the existing mixed use of “gates” and “security gates”. There was no previous distinction in the terms and the use of consistent terminology clarifies the applicability of these regulations to all gates, regardless of the level of security they provide. This language was revised to delete specific authorities granted to the local jurisdictions to approve gates, as this authority is already inherent in the structure of these regulations. This is necessary to reduce redundancy and improve clarity in these regulations.

The proposed action additionally specifies that all electronic gates must have a manual method of opening in case of electronic failure and specifies that this manual method must be maintained operational at all times, where existing regulation compelled operational status at all times. The purpose of this revision is acknowledgment of the potential for electronic failure, which is likely to be an issue during a wildfire event, and

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clarification that only a mechanical method of opening gates is compulsory. This is necessary in order to maintain a realistic and achievable level of fire safe access for emergency response.

§1273.11(b) revises existing language in §1273.09(a) to more clearly specify the required width of a gate serving a Road or Driveway. The requirement in the existing regulations is that a gate entrance shall be two feet wider than the traffic lane, but given that some Roads require additional width due to shoulders and striping, it was necessary to clarify that the gate entrance width is intended to be 2 feet wider than the entire road surface, not just the Traffic Lane. An additional requirement was added to this section requiring that where a gate is installed across an existing road or driveway, the gate shall be no less than ten (10) feet wide. This requirement is necessary to specify the standards for gates crossing existing Roads or Driveways that are narrower than the standards in § 1273.05. Additional changes were made to use defined terms, which is necessary for consistency within the regulations.

Additionally, the proposed action requires that the above stated clearance be maintained at all time, which provides for improved visibility and is necessary to ensure fire safe access through gates and gate entrances.

§ 1273.11(c) places the existing requirement in §1273.09(c) to this section. Figure 7 was added to depict turning templates for vehicles turning into these Roads or Driveways and demonstrate the intent of the regulation. These revisions are necessary to provide greater clarity regarding these standards and ensure consistent implementation in the field.

§1273.11(d) moved §1273.09(b) to this section and added a reference to the new Figure 7 showing the turning template and requires that gates open in the direction of road travel, where the previous regulations allowed for a gate to open to allow a vehicle to stop without obstructing traffic on the road. This prescriptive requirement ensures consistency of application and reduces potential issues with gate variation for emergency responders. These revisions are necessary to provide greater clarity regarding these standards and ensure consistent implementation in the field.

### **§1273.12 Standards for Existing Roads**

This section sets minimum requirements for Existing Roads subject to this Subchapter pursuant to § 1273.00(c) and (d). It is necessary to set different standards for existing versus new roads, as existing roads face different limitations when a local jurisdiction contemplates road improvements for fire safety. Existing easements or ownership patterns, topography and terrain, or environmental constraints may limit the ability of an Existing Road to meet the standards for New Roads in this Subchapter. However, there are standards for Existing Roads that would provide for fire safety that could be applied to Existing Roads under such constraints.

§ 1273.12(a)(1), (2), and (3) require Existing Roads to provide for at least one 14 foot Traffic Lane, non-native surfacing for at least 50% of the Roads length, and either

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Turnouts in compliance with § 1273.09, or a 20 foot Clear Width. These requirements are necessary to allow for adequate Fire Apparatus access along the Road, a suitable surface that provides traction, and additional width to allow Fire Apparatus and civilian vehicles to safely pass each other.

§ 1273.12(b) specifies that when an Existing Road provides Access to Buildings that are being reconstructed after a Wildfire, it shall be provided with a 14 foot Traffic Lane for a distance of 22 feet, at an interval of at least every 400 feet. It is necessary to establish a different standard for existing roads being reconstructed or repaired after a Wildfire because of the unique nature of Wildfire impacts and rebuilding processes. When a neighborhood goes through a Wildfire event, frequently the Structures in the neighborhood burn in a patchwork pattern, where some Structures are standing and others are burned. When this happens along an Existing Road that does not meet the standards in § 1273.12(a), it places an undue burden on those who have lost their homes to improve the road for those who have not. This subsection requires Existing Roads providing Access to Buildings being reconstructed or repaired to meet minimal fire safety requirements that ensure a neighborhood is provided with a higher level of safety than it was previously, but avoids situations where one or a few property owners are prevented from rebuilding because it is out of their financial reach to improve an entire road. The prescriptive standard for an Existing Road subject to § 1273.12(b) requires that an Existing Road have the equivalent width of a Driveway (see § 1273.05(d)) for at least 22 feet at an interval of at least every 400 feet (the equivalent requirements for Turnout length and spacing under § 1273.09). These dimensions are necessary to provide enough horizontal space for a vehicle to pull to the side to allow another vehicle to pass, and necessary to provide those spaces frequently enough that any vehicles that need to back up on a road to reach those spaces can do so safely. Because of the unique nature of Wildfire impacts on the built environment described earlier, it is necessary to provide greater flexibility is given to local jurisdictions to determine, if the required width at the required intervals is not possible, where Road improvements would be most appropriate.

§ 1273.12(c) specifies that an Existing Road providing Access to Buildings shall not exceed a grade over 25% for a distance over 500 linear feet. This is necessary to ensure that Existing Roads are not so excessively steep that Fire Apparatus and other vehicles cannot safely traverse the Road. A limit of 25% allows for Development to occur on Roads that might exceed the standards in § 1273.04 Road and Driveway Grades but may still provide safe passage. Several county planners indicated that many existing roads in their counties exceed the grade requirements in § 1273.04 but generally do not exceed 25%, and that those roads have in the past been used by Fire Apparatus. This requirement allows flexibility for Existing Roads that exceed the grade requirements in § 1273.04 but still demonstrate a level of fire safety.

§ 1273.12(d) provides that where an Existing Road does not meet the requirements of § 1273.12(a), but does provide for a secondary route in conformance with § 1273.13 Secondary Routes for Existing Roads, that Existing Road does not need to satisfy the requirements of § 1273.12(a). This is necessary to provide greater flexibility when

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Access is being provided by Existing Roads that do not meet the requirements in § 1273.12(a); rather than improving the Existing Road to meet the specified standard, a secondary route may be installed instead to provide for fire safety.

The purpose of these amendments are to provide minimum standards for safe access related to Existing Roads and are necessary in order to full effectuate the requirements for providing fire safe access as described in PRC 4290.

### **§1273.13 Secondary Routes for Existing Roads**

The proposed action identifies minimum standards for secondary routes for existing roads. These standards are intended to clarify fire safe access requirements for these roads and are necessary for the implementation of the regulations. The requirements for secondary access is that they are constructed to meet the geometric requirements of New Roads and shall provide for legal and deeded Access to ensure that the access is provided in perpetuity. Secured routes (those with gates) are allowed as long as they meet the requirements in §1273.11. §1273.13(b) notes that the Secondary routes shall connect the user to an alternative route to ensure two means of accessibility in the event that the primary route is compromised. The purpose of these amendments are to provide minimum standards for safe access related to secondary routes and are necessary in order to fully effectuate the requirements for providing fire safe access as described in PRC 4290.

## **Article 3. Signing and Building Numbering**

### **§1274.00. Road Name Signs (previously called Intent)**

§1274.00(a) was added to note that all Road signs shall conform to the requirements of the California Manual of Uniform Traffic Control Devices (CA MUTCD). This document is the standard for all signage in the state. Adding this reference is necessary for creating a consistent approach with statewide requirements for traffic information and traffic control throughout the state.

§1274.00 (b) is a relocation and renumbering of 1274.01 with revisions to improve clarity. The word “New” was added before “Roads” to clarify when this provision applies and for consistency with provisions and terms in Articles 1 and 2. The word “must” was changed to “shall” for consistency with other wording throughout the section. The word “/or” was deleted related to patterned numbering and non-duplicative naming to improve grammar correctness. The second sentence deleted the phrase “nor shall a road providing access only to a single commercial or industrial occupancy require naming or numbering” in order to ensure that all building construction regardless of type provided fire safe access standards related to road signs and is necessary for the total implementation of these regulations.

§1274.00(c) is the relocation of existing language in § 1274.01(b) to support the restructuring of these regulations described above and provide additional clarity. There are no substantive revisions to this provision.

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## **§1274.01. Road Sign Installation, Location, and Visibility**

This section title was changed to more accurately reflect the section contents.

The existing provision §1274.02(a) was deleted from the regulations as it pertained to visibility of the signage. This deletion was necessary because this provision is already regulated by Title 24, California Code of Regulations (California Building Standards Code) and therefore was duplicative in these regulations. The remaining subsections in §1274.02, now in § 1274.01, were renumbered accordingly due to the deletion.

The revised §1274.01(b) capitalized words that are defined in Article 1, including Dead-end Roads and One-way Roads. This subsection also replaced the term “conditions” with “Roads and bridges” to align with the terms used throughout these regulations and reduce any ambiguity on the interpretation of “conditions.”

Subsections 1274.01(b)(1) and (2) remove the term “access,” as “Access” is now a defined term in these regulations.

§1274.01(d) added a new requirement for minimum sign retroreflectivity and illumination references. These requirements are consistent with requirements in the CA MUTCD. The purpose of adding these requirements is to increase visibility of signs during nighttime or reduced visibility situations, such as smoke, to improve public and firefighter safety during a wildfire event.

## **1274.03. Addresses for Buildings**

§1274.03 (a) deleted the reference to the overall address system and how units are identified. These provisions are regulated by Title 24, California Code of Regulations (California Building Standards Code) and are duplicative in these regulations.

Subsection (a) was revised to combine it with §1274.03 (b), eliminate the reference to the size of letters, numbers and symbols, and state that the address shall be consistent with the California Fire Code. This revision was necessary because this provision is already regulated by California Fire Code and therefore was duplicative in these regulations.

## **1274.04. Address Installation, Location, and Visibility**

This section was deleted as it is regulated by Title 24, California Code of Regulations (California Building Standards Code) and is duplicative in these regulations.

## **Article 4. Water Supply (previously called Emergency Water Standards)**

This article title was changed to Water Supply to align with updated content.

## **1275.00 Application (previously called Intent)**

The existing language in this section was deleted, as it was unnecessary given the general authority of these regulations to require conformance with any standards therein.

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§1275.00 copies existing language from §1275.01 and then further expands it to provide greater specificity regarding the application of this Article. This is necessary in order to ensure consistent compliance with these requirements and effectuate the purpose of PRC 4290.

§1275.00(a) adds to the existing applicability of water supply by including the requirement for water supply when new Building construction occurs and this building construction is not already served by an existing water supply. This additional requirement addresses circumstances where a new Building, as defined in § 1270.01, cannot be approved unless adequate water supply is available as established in this Article. Adequate water supply for every Building is necessary for a safe and effective response during a wildfire emergency to help protect these structures. Without having an adequate water supply in place, it becomes more difficult for firefighters to conduct suppression activities on fires that threaten structures.

§1275.00(b) is a new subsection that identifies which types of existing water supply facilities are not subject to the requirements of Article 4. This additional language was added to remove any potential ambiguity as to whether existing water or wastewater facilities, including those undergoing repairs, reconstruction, or upgrades, would be subject to the same provisions as those activities in subsection (a). This is necessary to prevent minor repairs from triggering the Fire Safe Regulations, resulting in unnecessarily burdensome requirements to upgrade the entire water system. This clarification was based on consultation with experts from the Association of California Water Supply Agencies (ACWA) during a focused meeting on January 6, 2021, and followed written comments submitted by the ACWA. The “water and wastewater systems” text aligns with language commonly used in the water supply industry. The “newly constructed” text was added to specifically focus these standards on new water and wastewater systems that are constructed to meet the water supply requirements of new development only. The text “includes, but is not limited to, water storage tanks and reservoirs, pump stations, treatment facilities, regulator stations, fire hydrants, and similar water and wastewater system devices” specifically identifies the exclusion of changes made to existing water or wastewater facility components for the purposes of maintenance or upgrades.

Subsection (c) is a new subsection that specifies when either the California Fire Code or standards from the National Fire Protection Association (NFPA) are referenced in this Article that all the sections within the relevant code or standard referring to alternative methods for compliance, equivalencies, or modifications to those specified standards are also applicable. This language was added to clarify the authorization of a Local Jurisdiction to undertake alternatives, equivalencies, or modifications of the sections within these relevant codes.

### **1275.01 Approved Water Supply (previously called Application)**

The existing language in § 1275.02 was moved to § 1275.01 to reflect the deletion of the existing text in § 1275.00. This section title was updated to add the word “Approved” before “Water Supply” to specify the standards on water supplies that are

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approved by the Local Jurisdiction, as opposed to existing natural, or other water sources that may be used for wildfire response but are not required to be approved by the Local Jurisdiction as part of Building construction approval. This text update was added after discussions with water engineering experts from ACWA during a focused meeting on January 6, 2021, and written comments submitted by the ACWA.

The existing text from § 1275.02 was moved to this section with some reorganization and revisions.

§ 1275.01(a) requires that all water supply systems meet or exceed the California Fire Code. To replicate the standards in the California Fire Code here would be redundant and create the potential for conflicts if the California Fire Code is updated without a commensurate update to the State Minimum Fire Safe Regulation, so it is necessary to provide a reference to the California Fire Code here instead. § 1275.01(b) provides for an alternate standard to the California Fire Code, which is necessary to provide flexibility in situations where the requirements of the Fire Code might not be achievable. The purpose of the amendments is to utilize one standard of water supply in these instances where a municipal-type supply is not available, and the standards provided in the cited NFPA document are suitable and appropriate for providing such a supply.

§ 1275.01(c) reflects existing language from § 1275.02(a), but clarifies that all Building construction shall install a water supply system. This is necessary to align this section in conformance with the requirements for water supply systems specified in § 1275.00. This reduces confusion regarding when water supply systems shall be installed. The second sentence of this subsection, regarding the timing of water supply installation, is unchanged from the existing language in § 1275.02(a).

The existing language in § 1275.02(c) has been moved to § 1275.06 to improve organizational flow, logic and readability of this Article.

§ 1275.01(d) copies existing text from § 1275.02(d), and adds a provision which identifies that other water supplies that may be required by law can also be used to satisfy the legal requirements identified in this article, under certain conditions. This information is necessary to clarify that separate or distinct systems need not be constructed so long as a system complies with these regulations and provides the required quantity of water required in these regulations.

§ 1275.01(e) copies existing language from § 1275.02(e) with no changes. This is necessary for clarity and to fully effectuate the reorganization of this section.

### **1275.02 Identification of Water Sources (previously called Water Supply)**

The text from § 1275.04 titled “Signing of Water Sources” was moved to this section, re-titled to “Identification of Water Sources,” reorganized and updated for clarity. These are existing requirements, except for removing the reference to the “State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988” and replacing it with “or as specified by the local fire authority.” This was

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changed because the State Fire Marshal document is not readily available for reference. The purpose of these amendments are to provide improved clarity and implementation with regard to sign location requirements and are necessary to provide improved flexibility for the implementation of these regulations. The term “Fire Valve” was deleted, since it is no longer a defined term in these regulations.

The existing language in this section was moved to § 1275.01. Please see above for purpose and necessity statements.

### **1275.03 Secured Water Sources (previously called Hydrants and Fire Valves)**

This new section and text was created to establish minimum requirements for breakaway locks when water supplies or associated fixtures are normally secured by gates, doors, or other locking systems. Specifying requirements for these security features is necessary to facilitate firefighter access to these water systems under emergency conditions. Providing these requirements helps firefighters to quickly access water supplies. This text was created based on consultation with a fire service working group during a virtual meeting on October 14, 2020 and responses received through a questionnaire to the Fire Chiefs Working Group in September 2020.

### **1275.04 Municipal Water System Hydrants and Fire Valves (previously called Signing of Water Sources)**

This section was moved from § 1275.03. and was re-named to reflect defined terms and the contents of this section.

Subsection (a) added the word “Municipal-Type” before “Fire Hydrant” for consistency with defined terms.

Subsection (b) was revised to allow for the Local Jurisdiction to determine the appropriate hose connection sizes on Fire Hydrants, while still requiring a standardized thread pattern to ensure compatibility across the state. This is necessary to provide Local Jurisdictions the flexibility to install Fire Hydrants that meet any specified local requirements while ensuring consistency across the state so out-of-area resources responding to a Wildfire can access water supplies via hydrants.

Subsection (c) removed the reference to freeze protection because it is already addressed in § 1275.01(e) and so further reference to this requirement was redundant. This text was replaced by text that describes the alternative of a performance-based system “where a municipal water supply hydrant system is not practical” that can be approved by the Local Jurisdiction, “in consultation with the local fire authority”. This section also requires that the alternative system meets the minimum water supply requirements of 250 gallons per minute (gpm) for two (2) hours”. This is necessary to establish a standard for local jurisdictions that meets the NFPA 1142 and International Organization for Standardization (ISO) minimum fire flow requirements where the more prescriptive standard in §1275.04 is not achievable.

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## **1275.05 Dry Hydrants**

This is a new section that was developed to specifically address the minimum requirements for dry hydrant systems, where the local jurisdiction has approved the use of them. Although alternative water supplies are provided for in § 1275.01.(c) and (d), this section provides clear minimum requirements for dry hydrant systems, which have different system requirements than standard Fire Hydrants, to provide firefighters with a reliable water source for fire suppression close to an incident. This is necessary to ensure all requirements of PRC 4290 are met by establishing minimum fire safety standards specific to the different kinds of hydrant systems available for installation. NFPA 1142 (2017) Chapter 8 (8.3, 8.4, 8.5, 8.6, 8.7 and 8.8) provides detailed technical requirements for dry hydrant systems, which are agreed upon by technical experts and is suitable and appropriate for application here, and therefore is specifically referenced as the minimum requirements for this section.

## **1275.06 Mobile Water Supply (Water Tenders)**

This is a new section that was developed to specifically address the minimum requirements for mobile water tender systems, where the local jurisdiction has approved the use of them. This section is necessary to provide specific minimum requirements for mobile water tender systems that provide water supply to an area when no other option exists. Subsection (a) specifies the conditions under which a mobile water supply may be approved, which is necessary to limit the circumstances under which a mobile water supply is allowed. By limiting the use of mobile water supplies these regulations ensure that Development is provided with the highest level of water supply for fire safety as possible.

Subsection (b) establishes that the mobile water supply shall arrive on site within 5 minutes of the first arriving apparatus, and supply a minimum of 250 gpm for two (2) hours of water supply. This requirement is necessary to establish a minimum fire flow that reflects industry best practices found in the NFPA 1142 and International Organization for Standardization (ISO) minimum fire flow requirements.

Subsection (c) adds a reference to NFPA 1142 Annex C to provide an alternative for achieving minimum fire flow requirements for mobile water supply. This alternative standard is necessary to provide flexibility to local jurisdictions when the prescriptive standard in § 1275.06(b) is not achievable.

## **1275.07 Protection of Water Supply Infrastructure from Wildfire**

This is a new section that was developed to specifically address the potential impacts of wildfire on water supply systems. This text addition was based on discussions with fire experts who shared direct experience with water system infrastructure that was threatened or destroyed by fire because it was made of combustible material. The specific text change is intended to reduce the effects of ember impacts, radiant heat and convective heat that can damage or destroy critical water supply infrastructure, rendering it inoperable or unavailable for use by fire suppression resources. The loss of

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this water supply makes it more difficult for firefighters to conduct suppression activities on fires that threaten structures. This text change was also further refined and supported by consultation with the Fire Chiefs Working Group, including virtual meetings on December 14, 2021 and written comments from Los Angeles County submitted on December 31, 2020.

The specific requirements in this section are necessary to protect this infrastructure from the impacts of radiant heat, convective heat and embers. This is important for the protection of water supply infrastructure to increase the likelihood that it will be available for suppression efforts during a wildfire. These changes are based on the defensible space requirements for buildings in Public Resource Code Section 4290, and the construction requirement in California Building Code (California Code of Regulations Title 24, Part 2) Chapter 7A, along with recommendations from the Fire Chiefs Working Group during virtual meetings on December 14, 2021.

### **Article 5. Building Siting, Setbacks and Fuel Modification (previously called Fuel Modification Standards)**

This article title was changed to better reflect the scope of the content in the section that extends beyond strictly “Fuel Modification” and to provide organizational clarity within the document.

#### **1276.00 Applicability (previously called Intent)**

The existing language in this section was deleted, which was necessary as it had become redundant as intent language for each particular standard was moved into the specific section for that standard.

New text in this section was added to specify when the requirements of this Article apply in different Building and Development processes. This is necessary to provide clarity to the regulated public regarding when these requirements apply, as not all of the requirements are appropriate for all types of Building construction or Development.

#### **1276.01 Building and Parcel Siting and Setbacks (previously called Setback for Structure Defensible Space )**

This section was renamed to better reflect its contents.

§ 1276.01(a) was revised added language that provides for exceptions to this requirement as set forth in subsection (b), for clarity.

§ 1276.01 (b) was revised to remove the term “same practical effect” as it is no longer a defined term. This subsection was revised for written clarity, and greater specificity was added to the non-exhaustive list of practical reasons for which a reduced setback may be necessary. The term “easements” was deleted, as easements are now captured in the broader phrase “other site constraints.” These revisions were necessary to provide clearer specificity to the regulated public. The phrase “shall reduce Structure-to-

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Structure ignition” was added to specify that when reductions in the required setbacks are provided for, there shall be features on the site that provide for fire safety. The non-exhaustive list of such appropriate features was numbered for clarity.

The existing requirement under § 1276.01(c) was deleted in its entirety, as it was redundant with the existing code it cited, and was unnecessary to specify in these regulations.

### **1276.02 Ridgelines (previously called Maintenance of Defensible Space Measures)**

§ 1276.02 revises existing language in Maintenance of Defensible Space Measures by moving portions of that text to §1276.05 and creating a new section called Ridgelines. This is a new section that was added to meet the new legislative requirements of PRC 4290 (b) which states that these regulations shall include measures to preserve undeveloped ridgelines to reduce fire risk and improve fire protection. To address this legislative requirement, “Ridgelines” and “Undeveloped Ridgelines” are now defined in § 1270.01 and the specific requirements for assessing and preserving Undeveloped Ridgelines are described in § 1276.02 subsections (a), (b), (c ) and (d).

§1276.02 (a) requires the Local Jurisdiction, in consultation with the Fire Authority, to identify the presence of ridgelines that have strategic value. The text provides the general parameter for an assessment or factors to help determine the strategic nature or ridgelines related to the purpose of these regulations for improving fire safety and response. These factors are topography, vegetation, proximity to existing or proposed development, and the appropriateness of the ridge to support suppression operations. It is necessary to specify these factors so that there is consistent criteria applied across the state when local jurisdictions are identifying ridgelines pursuant to this section.

The topography factor is important with regards to elevation, slope, terrain and general orientation of the ridge. These factors not only influence fire behavior but will also determine accessibility for fire suppression and suppression resource safety concerns. Topography also influences the complexity and effort of undertaking successful fuel management.

The vegetation factor influences fire behavior, suppression success and fire suppression resource safety. Vegetation type will also influence the effort required to successfully undertake fuel management.

The proximity of residential, commercial or hazardous land uses to ridges will influence the both the suppression response and fuel management options and complexity.

Finally through consideration of the above factors, in addition to any other factors, such as but not limited to, the type and number and distance to suppression resources, access to the ridge local weather influences can help determine the appropriateness for a ridge to support effective fire suppression.

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§1276.02 (b) requires that Undeveloped Ridgelines which are identified as strategically important to the local jurisdiction must be preserved. This is necessary to effectuate the requirements of PRC 4290(b).

§1276.02 (c) prohibits the construction of new Buildings on Undeveloped Ridgelines that are identified as strategically important. This provision further specifies that this prohibition does not include non-occupied Buildings, such as, but not limited to Group U Structures, as defined. This section is necessary to fully effectuate the requirements of PRC 4290(b).

§1276.02 (d) specifies that these are a minimum set of requirements which do not restrict the Local Jurisdiction from implementing additional requirements to preserve Undeveloped Ridgelines. This is necessary to specify that a Local Jurisdiction retains the authority to add additional requirements as may be necessary to achieve locally specific goals or objectives related to such preservation. This is necessary to further implement PRC 4290(c), specifying that local regulations which equal or exceed the state minimums may be implemented.

### **1276.03 Fuel Breaks (previously called Disposal of Flammable Vegetation and Fuels)**

Existing language in §1276.03 (Disposal of Flammable Vegetation and Fuels) was moved to a new section §1276.06. §1276.03 is renamed to reflect its contents.

The rationale for developing text that specifically addresses Fuel Breaks as a separate requirement from Greenbelts is based on the functional differences between Fuel Breaks and Greenbelts. The purpose of Fuel Breaks is to lower fire behavior by influencing intensity, spread rate, or ember impacts. A Greenbelt may alter an area through the type of land management features allowed or development activities that are restricted, but this does not automatically include inherent features that reduce fire behavior.

For organizational purposes, this section is delineated into subsections (a), (b), (c), (d), (e), (f) and (g).

§1276.03(a) identifies the thresholds for when Building construction or Development is required to meet the standards in this section. These are the same thresholds specified in § 1273.00, which is necessary for consistency within the regulations.

The first subsection, (a)(1), specifies that this section applies where Building construction includes the division of land into 3 or more parcels. This division into 3 more parcels was selected to reflect the distinction in these regulations between a Driveway and a Road; once a vehicular pathway serves more than 2 parcels, it must meet the stricter Road standards in this Subchapter rather than the Driveway standard. A common point of ignition for Wildfires is along roadsides, and so it is necessary to ensure that New Roads, or Driveways that are improved to meet the New Road

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standards, be served with a Fuel Break that can slow or stop a Wildfire advancing from the Road into a community or into the wildlands.

The second and third subsections, § 1270.00(b)(2) and (3), provide greater specificity regarding what kinds of zoning changes or use permits require the application of these regulations to Existing Roads. This specificity is necessary so that only those applications for zoning changes and change of use permits that would materially negatively impact fire safety are subject to these regulations. This provides clarity to regulated public, will result in the consistent application of these regulations statewide, and reduces regulatory burdens on proposed Building construction or development that is not anticipated to materially negatively impact fire safety. An increase in zoning and use intensity or density is likely to increase the number of site visitors, leading to a higher likelihood of roadside ignitions as well as a higher number of people at risk if a wildland is advancing towards the area. It is necessary to ensure that these kinds of projects are served by a Fuel Break that can slow or stop a Wildfire advancing from the Road into a community or into the wildlands, or a Wildfire advancing on the community from the wildlands.

§1276.03(b) provides requirements for the design of a Fuel Break to change fire behavior outcomes with regards to reducing wildfire exposure to Access routes, Buildings, or infrastructure with the Development. This section was necessary to set consistent criteria for establishing Fuel Breaks across the state while simultaneously accounting for the diversity of vegetation, weather, and topography that influence fire behavior conditions across the state of California, as well as the diversity of methodologies and strategies available to Fire AUthorities and Local JUrisdictions for achieving the Fuel Break design objectives.

§1276.03(c) provides a non-exhaustive list of the typical locations of Fuel Breaks that would be reasonably associated with Building construction. This is necessary to establish the expectations of these fuel breaks so they may be evaluated for implementation success.

- (1) This paragraph focuses Fuel Breaks on locations that will support Defensible Space around buildings, or infrastructure. In situations where setbacks on individual parcels cannot accommodate the full 100 feet of Defensible Space pursuant to PRC 4291, the importance of the location and treatment of these fuel breaks is increased.
- (2) This paragraph focuses Fuel Breaks on locations that will support potential fire apparatus access roads, or evacuation routes. Locating and treatment of Fuel Breaks along these routes to lower the fire behavior is necessary to include as it will increase the safety of firefighters and public by reducing the radiant and convective heat they may be unintentionally exposed to.
- (3) This paragraph focuses Fuel Breaks on locations that will support and allow for the effective reduction in fire behavior of a wildfire spreading from, or exposing a hazardous land use that can create a cumulative increase in fire threat. Examples of hazardous land uses are, but not limited to, sawmills, log sorts, lumber yards, flammable gas, or flammable liquid facilities, powerlines. These

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sites are hazardous because they increase the potential for fire ignition, fire behavior, or explosion when exposed to radiant heat, convective heat, or ember impacts. Locating and treatment of fuel breaks adjacent to these land uses to lower the fire behavior is important, as it will increase the safety of firefighters and public by reducing the radiant and convective heat they may be exposed to during a wildfire event, or their potential for starting and spreading a wildfire.

- (4) This text focuses Fuel Breaks on locations that will support the effectiveness of strategic Ridgelines, Greenbelts or other locations that are strategically important for reducing fire exposure to a community.

§1276.03 (d) specifies the requirement that Fuel Breaks must be completed prior to commencing permitted construction. This requirement is necessary to address the increased risk of fire ignition during the construction phase, given the large amounts of stored combustibles present, and Structures that have not yet been completed and the fire resistant features, such siding, windows, doors, vents and roof covering have not yet been installed. This situation leaves the structures and defensible space highly susceptible to fire, therefore it is necessary to minimize both the potential exposure of buildings under construction to fire, and minimize the potential of the construction site becoming an ignition source for a wildfire.

§1276.03 (e) adds a requirement that Fuel Break design and implementation consider the most ecologically and site appropriate treatment option, which is necessary to ensure that impacts of fuel treatment are minimized. In many California ecosystems, the treatment of a Fuel Break, or a wildfire that burns into a strategically located fuel break that is designed to reduce fire intensity, rate of spread and/or crown fire potential, can also result in beneficial fire effects to the local and surrounding ecosystem and environmental conditions.

§1276.03 (f) requires a minimum of one point of access for fire suppression resources to Fuel Breaks. Depending on the site conditions and need, the Local Jurisdiction may require additional access routes and access points. Fuel Breaks are designed to lower potential fire behavior to provide a strategic fire suppression advantage; ground based fire suppression resources are still required to stop a wildfire from spreading. Therefore, it is necessary to specify that access to the Fuel Break be installed, to ensure firefighter access to these strategic tactical positions.

### **1276.04 Greenbelts, Greenways, Open Spaces and Parks**

This section title was changed to more accurately reflect the full scope of requirements. Furthermore, there were substantial revisions to the existing language of this section. The existing language was deleted, because the revised language offers greater clarity and specificity and to retain the existing language would have been confusing and redundant.

New language in §1276.04 (a) requires that any "...Greenbelt, Greenway, open space, park, landscaped or natural area, or portions thereof..." that will serve as a Fuel Break will be subject to the requirements of §1276.03 Fuel Breaks. Adding this language was

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necessary to clarify that these areas cannot serve as Fuel Breaks unless the vegetation within it is treated so it is in a condition that reduces wildfire behavior. This section was expanded to include other natural areas in addition to Greenbelts. This was necessary to recognize that there are other natural areas that could be considered as a potential Fuel Break and therefore should also be subject to the same requirements as a Greenbelt when they are intended to serve as a Fuel Break. Clarifying and expanding this section is also necessary to improve fire safety by setting up a consistent approach for natural areas that are intended to serve as a Fuel Break.

§1276.04 (b) provides the authority for a Local Jurisdiction to require Greenbelts or Greenways or other open areas for the purpose of potential public areas of refuge, or firefighter safety zones, as a last resort if evacuation is not possible. This is necessary to specify that the Local Jurisdiction retains the authority to propose Greenbelts for other uses, such as areas of last resort.

### **1276.05 Maintenance of Fuel Breaks**

This is a new section, but contains revised text from the existing § 1276.02. The title of this section more clearly reflects its content. The existing text in § 1276.02 is largely deleted here; as the revised language provides for greater clarity and specificity, retaining that language in this section would be redundant and confusing.

§1276.05(a) provides the requirement for Fuel Breaks to be maintained in a manner consistent with the requirements of the Fuel Break section. Vegetated areas are dynamic and can change over time at varying rates, dependent on the specific site characteristics. This provision was necessary to ensure that Fuel Breaks as required in these regulations remain effective through ongoing maintenance and continue to serve the purpose of fire risk reduction to adjacent Buildings or Development.

§1276.05(b) revised the language in §1276.02 to require a binding mechanism that compels the property owner or land manager to undertake Fuel Break maintenance and ensure that funding is in place for the work. This revision was necessary to apply the maintenance provision to Fuel Breaks through a legal structure that is specific and enforceable.

### **1276.06 Disposal of Flammable Vegetation and Fuels**

This is a new section containing revised text from existing § 1276.03. This section makes revisions to the existing text to improve clarity. It removes references to the activities of “chipping” and “burying,” which is necessary to reduce redundancy as chipping and burying would both require the vegetation and fuels to be removed to a different site, which is already specified in this section. This revised language also specifies that such disposal shall comply with all applicable laws, which is necessary to acknowledge that these regulations are not the only regulatory scheme that provides standards for such activities. Existing language which required that the disposal of vegetation and fuel be complete prior to completion of road construction or final inspection of a building permit was removed for the purpose of clarity; this deletion was necessary because not all relevant Building construction or development requires either

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Road construction or a final inspection of a building permit. This requirement was too specific without offering a clear fire safety benefit.

### **ECONOMIC IMPACT ANALYSIS (pursuant to GOV § 11346.3(b)(1)(A)-(D) and provided pursuant to 11346.3(a)(3))**

The **effect** of the proposed action is the following:

- reorganized regulations that provide clear standards to the regulation public;
- consistency in terms within and between these regulations and relevant codes;
- Standards for fuel breaks and greenbelts near communities;
- Measures to protect undeveloped ridgelines; and
- more options to achieve prescriptive requirements.

### **Creation or Elimination of Jobs within the State of California**

To the extent this proposed action increases costs for businesses, those costs are passed on to the end user (ie, the individual). No creation or elimination of jobs will occur as a result of this action.

### **Creation of New or Elimination of Businesses within the State of California**

The regulatory amendments as proposed represent a continuation of existing fire safe development regulations and to the extent that any new regulatory requirements in this action have a cost to implement, that cost will be passed on to the end user (ie, the landowner and/or eventual land or homeowner, if the land is initially developed by a corporate entity). The proposed regulation will neither create new businesses nor eliminate existing businesses in the State of California.

### **Expansion of Businesses Currently Doing Business within the State of California**

The regulatory amendments as proposed represent a continuation of existing fire safe development regulations. The proposed regulation will not result in the expansion of businesses currently doing business within the State.

### **Benefits of the Regulations to the Health and Welfare of California Residents, Worker Safety, and the State's Environment**

The proposed action will have beneficial effects on health, welfare, and worker safety, and may benefit the State's environment. This proposed action relates to the creation of defensible space in the SRA and VHFHSZ, which provides for the safety of residents by preventing home ignition and stopping or slowing the spread of wildfires and provides for the safety of firefighters when responding to wildfires. Defensible space may also benefit the environment by slowing or stopping the spread of a wildfire. Reducing a wildfire's impacts benefits human health, via less emissions and particulate matter reducing air quality, and by reducing the potential destruction of ecological communities.

### **Business Reporting Requirement (pursuant to GOV § 11346.5(a)(11) and GOV § 11346.3(d))**

The proposed regulation does not impose a business reporting requirement.

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## Summary

In summary, the proposed action:

- Will not create jobs within California (GOV § 11346.3(b)(1)(A)).
- Will not eliminate jobs within California (GOV § 11346.3(b)(1)(A)).
- Will not create new businesses (GOV § 11346.3(b)(1)(B)).
- Will not eliminate existing businesses within California (GOV § 11346.3(b)(1)(B)).
- Will not affect the expansion or contraction of businesses currently doing business within California (GOV § 11346.3(b)(1)(C)).
- Will yield nonmonetary benefits (GOV § 11346.3(b)(1)(D)). For additional information on the benefits of the proposed regulation, please see anticipated benefits found under the “Introduction Including Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address.”

## **SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS, INCLUDING ABILITY TO COMPETE (pursuant to GOV §§ 11346.3(a), 11346.5(a)(7) and 11346.5(a)(8))**

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states, by making it costlier to produce goods or services in California.

## **FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE RELIED UPON TO SUPPORT INITIAL DETERMINATION IN THE NOTICE THAT THE PROPOSED ACTION WILL NOT HAVE A SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS (pursuant to GOV § 11346.2(b)(5) and GOV § 11346.5(a)(8))**

Any increase in costs to a business as a result of these regulations is typically passed on to the consumer. A construction or landscaping company will charge the consumer the actual costs of the material goods needed to meet the requirements of these regulations (e.g., the cost of the amount of gravel required to meet minimum driveway requirements). These companies will also pass on any increase in labor costs (e.g., if it took laborers longer to achieve compliance with the new requirements) to the consumer. As a result, there will be no significant adverse economic impact on businesses.

## **TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENT RELIED UPON (pursuant to GOV SECTION 11346.2(b)(3))**

The Board relied on the following list of technical, theoretical, and/or empirical studies, reports or similar documents to develop the proposed action:

1. Syphard, A. D., Radeloff, V.C., Hawbaker, T. J., and Stewart, S. I. 2009. Conservation threats due to human-caused increases in fire frequency in Mediterranean-climate ecosystems. *Conservation Biology* 23(3):758-769.

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2. Syphard, A. D., Radeloff, V. C., Keeley, J. E., Hawbaker, T. J., Clayton, M. K., Stewart, S. I., et al. 2007. Human influence on California fire regimes. *Ecological Applications* 17(5):1388-1402
3. Price, O., and R. A. Bradstock. 2014. Countervailing effects of urbanization and vegetation extent on fire frequency on the Wildland urban interface: disentangling fuel and ignition effects. *Landscape and Urban Planning* 130:81-88.
4. National Research Council of the National Academies. *Advancing the Science of Climate Change*. 2010. The National Academies Press: Washington, DC.
5. California Department of Forestry and Fire Protection Emergency Fund Fire Suppression Expenditures. 2020.  
<https://www.fire.ca.gov/media/px5lnaaw/suppressioncostsonepage1.pdf>. Accessed March 19, 2020.
6. California Department of Forestry and Fire Protection CAL FIRE ENGINE MODELS 34-35 FACT SHEET. January 2008.
7. California Department of Forestry and Fire Protection Top 20 Largest California Wildfires <[https://www.fire.ca.gov/media/4jandlhh/top20\\_acres.pdf](https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf)>. Accessed March 19, 2021.
8. California Department of Forestry and Fire Protection Top 20 Most Destructive California Wildfires.  
<[https://www.fire.ca.gov/media/t1rdhizr/top20\\_destruction.pdf](https://www.fire.ca.gov/media/t1rdhizr/top20_destruction.pdf)>. Accessed March 19, 2021.
9. California Manual of Uniform Traffic Control Devices 2017 Revision 2
10. National Fire Protection Association (NFPA), Standard 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting", 2017 ed.
11. American Association of State Highway and Transportation Officials (AASHTO). 2018. A Policy on Geometric Design of Highways and Streets, 7th Edition.
12. Association of California Water Supply Agencies (ACWA) written communications dated January 19, 2021; verbal communications during Board workshops (December 22, 2020, January 27, 2021)
13. Los Angeles County Fire Department written communications dated December 31, 2020.
14. Benefield, M. n.d. Southern California Fuels Treatment Effectiveness Review. USDA Forest Service, Central Oregon Fire Management Service. <[https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5295359.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5295359.pdf)> Accessed March 18, 2021.
15. California Department of Forestry and Fire Protection. 2019. CAL FIRE Fuel Breaks and Use During Fire Suppression. March 21.  
<[https://www.fire.ca.gov/media/5585/fuel\\_break\\_case\\_studies\\_03212019.pdf](https://www.fire.ca.gov/media/5585/fuel_break_case_studies_03212019.pdf)> Accessed March 18, 2021.
16. California Department of Transportation (Caltrans). n.d. Highway Design Manual, 7th Edition. <<https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm>> Accessed March 18, 2021.
17. Chen Y., Shafi S., Chen Y. 2020. Simulation pipeline for traffic evacuations in urban areas and emergency management policy improvements through case

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- studies. Transportation Research Interdisciplinary Perspectives, Volume 7, 100210. <<https://doi.org/10.1016/j.trip.2020.100210>> Accessed March 18, 2021.
18. Excerpts from Fire Chiefs Working Group survey prepared and received September 2020; communications during scheduled calls on August 12, August 17, September 17, October 14, October 19, December 14 2020
  19. International Organization for Standardization (ISO). n.d. Water Supply Evaluations <<https://www.isomitigation.com/ppc/technical/water-supply-evaluations/>> Accessed March 18, 2021. Maranghides, A. , Link, E. , Brown, C. , Mell, W. , Hawks, S. , Wilson, M. , Brewer, W. , Vihnanek, R. and Walton, W. 2021. A Case Study of the Camp Fire - Fire Progression Timeline, Technical Note (NIST TN), National Institute of Standards and Technology, Gaithersburg, MD. <<https://doi.org/10.6028/NIST.TN.2135>> (Accessed March 18, 2021)
  20. Mowery, M., Read, A., Johnston, K., Wafaie, T. 2019. Planning the Wildland-Urban Interface. American Planning Association Planning Advisory Services Report 594. <<https://www.planning.org/publications/report/9174069/>> Accessed March 18, 2021.
  21. National Lime Association. 2004. Lime-Treated Soil Construction Manual - Lime Stabilization & Lime Modification. <[https://www.lime.org/documents/publications/free\\_downloads/construct-manual2004.pdf](https://www.lime.org/documents/publications/free_downloads/construct-manual2004.pdf)> Accessed March 18, 2021
  22. Syphard, A. D., Keeley J. E., Brennan T. J. 2011. “Comparing the role of fuel breaks across southern California national forests.” Forest Ecology and Management 261 2038-2048. <doi:10.1016/j.foreco.2011.02.030> Accessed March 18, 2021.
  23. Transoft Solutions, AutoTURN software. <https://www.transoftsolutions.com/vehicle-swept-path/?setRegion=en>. Accessed March 19, 2020.
  24. United States Department of Agriculture (USDA), United States Forest Service. 2014. 2013 Mountain Fire Fuel Treatment Effectiveness Summary. Pacific Southwest Region, October 2014. <[https://www.fs.fed.us/adaptivemanagement/reports/fbat/MountainFireFTE\\_110714\\_newFinal.pdf](https://www.fs.fed.us/adaptivemanagement/reports/fbat/MountainFireFTE_110714_newFinal.pdf)> Accessed March 18, 2021.
  25. Nicas, Jack, et al. “Forced Out by Deadly Fires, Then Trapped in Traffic.” *The New York Times*, 11 Nov. 2018. <https://www.nytimes.com/2018/11/11/us/california-fire-paradise.html>.
  26. US Federal Highway Administration “Highway Functional Classification Concepts, Criteria, and Procedures,” 2013 Edition
  27. American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, published 2002

### DOCUMENTS INCORPORATED BY REFERENCE (pursuant to 1 CCR § 20)

Pursuant to 1 CCR § 20(c), the follow documents are incorporated by reference in these regulations:

1. California Manual of Uniform Traffic Control Devices 2017 Revision 2

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2. American Association of State Highway and Transportation Officials (AASHTO). 2018. A Policy on Geometric Design of Highways and Streets, 7th Edition.
3. National Fire Protection Association (NFPA), Standard 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting", 2017 ed.
4. US Federal Highway Administration "Highway Functional Classification Concepts, Criteria, and Procedures," 2013 Edition
5. American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, published 2002

The Board has available the entire rulemaking file, including all information considered as a basis for this proposed regulation, available for public inspection and copying at its office in Sacramento, California.

### **REASONABLE ALTERNATIVES TO THE PROPOSED ACTION CONSIDERED BY THE BOARD, IF ANY, INCLUDING THE FOLLOWING AND THE BOARD'S REASONS FOR REJECTING THOSE ALTERNATIVES (pursuant to GOV § 11346.2(b)(4)(A) and (B)):**

- **ALTERNATIVES THAT WOULD LESSEN ANY ADVERSE IMPACTS ON SMALL BUSINESS AND/OR**
- **ALTERNATIVES THAT ARE LESS BURDENSOME AND EQUALLY EFFECTIVE IN ACHIEVING THE PURPOSES OF THE REGULATION IN A MANNER THAT ENSURES FULL COMPLIANCE WITH THE AUTHORIZING STATUTE OR OTHER LAW BEING IMPLEMENTED OR MADE SPECIFIC BY THE PROPOSED REGULATION**

The alternatives provided herein are provided pursuant to the APA (**GOV § 11346.2(b)(4)**) exclusively.

The Board has considered the following alternatives and rejected all but the "Proposed Action" alternative.

#### **Alternative 1: No Action**

The Board considered taking no action, but the "No Action" alternative was rejected because it would not address the legislative mandates in PRC 4290 to address fuel breaks, greenbelts, and ridgelines.

#### **Alternative 2: Performance Based Standards**

This alternative would have utilized performance-based standards instead of prescriptive based standards to achieve fire safety.

The Board rejected this alternative as specific, prescriptive requirements are necessary to achieve fire safety. Prescriptive requirements establish clear and enforceable statewide minimum standards that are more effective than performance based measures. Where possible, the Board included performance based measures instead of or in addition to prescriptive standards.

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## **Alternative 3: Proposed Action**

The Board accepted the “Proposed Action” alternative to address the problem as it is the most cost-efficient, equally or more effective, and least burdensome alternative. Alternatives 1 and 2 would not be more effective or equally effective while being less burdensome or impact fewer small businesses than the proposed action. Specifically, alternatives 1 and 2 would not be less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute being implemented or made specific by the proposed regulation than the proposed action.

Additionally, alternatives 1 and 2 would not be more effective in carrying out the purpose for which the action is proposed and would not be as effective and less burdensome to affected private persons than the proposed action, or would not be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposed action. Further, none of the alternatives would have any adverse impact on small business. “Small business” means independently owned and operated, not dominant in their field of operations, and having fewer than 100 employees.

## **Prescriptive Standards versus Performance Based Standards (pursuant to GOV §§11340.1(a), 11346.2(b)(1) and 11346.2(b)(4)(A)):**

Pursuant to **GOV §11340.1(a)**, agencies shall actively seek to reduce the unnecessary regulatory burden on private individuals and entities by substituting performance standards for prescriptive standards wherever performance standards can be reasonably expected to be as effective and less burdensome, and that this substitution shall be considered during the course of the agency rulemaking process.

The proposed action introduces additional prescriptive or performance based standards, but also provides for alternatives to those prescriptive standards. These alternatives allow government agencies and the regulated public to meet the intent of any given requirement in the State Minimum Fire Safe Regulations with a different tool or standard than that strictly allowed in these regulations. Alternative 3 is preferred as it provides the most flexible standards to the regulated public. The rationales for individual provisions serve as the explanation for why a standard is prescriptive.

Pursuant to **GOV § 11346.2(b)(1)**, the proposed action does not mandate the use of specific technologies or equipment.

Pursuant to **GOV § 11346.2(b)(4)(A)**, Alternatives 1 and 2 were considered and ultimately rejected by the Board in favor of the proposed action. The proposed action does not mandate the use of specific technologies or equipment, but does prescribe specific actions or procedures. Where possible, the Board included performance based measures instead of or in addition to prescriptive standards.

## DRAFT DOCUMENT

### **DESCRIPTION OF EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICT WITH THE CODE OF FEDERAL REGULATION (pursuant to GOV § 11346.2(b)(6))**

The Code of Federal Regulations has been reviewed and based on this review, the Board found that the proposed action neither conflicts with, nor duplicates, Federal regulations. There are no comparable Federal regulations for development and defensible space on private lands.

### **OTHER STATUTORY REQUIREMENTS (Gov. Code § 11346.5(a)(4))**

The California Environmental Quality Act (CEQA) requires that state agencies consider the potentially significant environmental impacts of their discretionary actions, which may include the development of regulations. Pursuant to CEQA, the adoption of regulations may, but will not inevitably, constitute a “project,” that is, “an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment” undertaken, supported, or approved by a public agency. If the development of regulations is determined to be a project, then to comply with CEQA the public agency must determine whether the project is exempt under either a statutory or categorical exemption. If the project is exempt, then no further environmental review is required under CEQA. (See Public Resources Code § 21084; 14 CCR § 15300.) If the project is not exempt, in accordance with CEQA the public agency must perform an environmental analysis, typically leading to either a Negative Declaration or an Environmental Impact Report (EIR). The approval by the public agency of one of these environmental documents or determinations should occur prior to the approval of the project, which in this case would be the adoption of the regulations. However, depending on the determination, CEQA may not require this to occur prior to adoption of the regulations.

The Board has not made a determination as to whether the present rulemaking action is a project under CEQA, nor whether, if it is a project, the development of the regulations is exempt from CEQA or another CEQA document such as an EIR or a Negative Declaration is required. If the Board determines that the development of the regulations is a project, and the project is not exempt, then CEQA will constitute one of the “other matters as are prescribed by statute applicable to the specific state agency or to any specific regulation or class of regulations” under § 11346.5(a)(4). If CEQA applies, the Board shall comply with all applicable CEQA requirements.

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[1] Syphard, A. D., Radeloff, V.C., Hawbaker, T. J., and Stewart, S. I. 2009. Conservation threats due to human-caused increases in fire frequency in Mediterranean-climate ecosystems. *Conservation Biology* 23(3):758-769.

[2] Syphard, A. D., Radeloff, V. C., Keeley, J. E., Hawbaker, T. J., Clayton, M. K., Stewart, S. I., et al. 2007. Human influence on California fire regimes. *Ecological Applications* 17(5):1388-1402

[3] Price, O., and R. A. Bradstock. 2014. Countervailing effects of urbanization and vegetation extent on fire frequency on the Wildland urban interface: disentangling fuel and ignition effects. *Landscape and Urban Planning* 130:81-88.

[4] National Research Council of the National Academies. *Advancing the Science of Climate Change*. 2010. The National Academies Press: Washington, DC.

## DRAFT DOCUMENT

[5] CAL FIRE Jurisdiction Fires, Acres, Dollar Damage, and Structures Destroyed (1933-2015). 2017. <[http://cdfdata.fire.ca.gov/pub/cdf/images/incidentstatsevents\\_270.pdf](http://cdfdata.fire.ca.gov/pub/cdf/images/incidentstatsevents_270.pdf)>. Accessed July 2, 2018.

[6] California Department of Forestry and Fire Protection Emergency Fund Fire Suppression Expenditures. 2017. <[http://www.fire.ca.gov/fire\\_protection/downloads/SuppressionCostsOnepage.pdf](http://www.fire.ca.gov/fire_protection/downloads/SuppressionCostsOnepage.pdf)>. Accessed July 2, 2018.

DRAFT

# EXHIBIT “E”



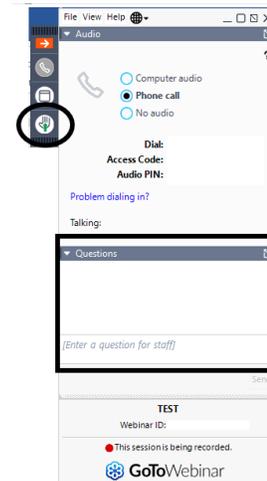
## FIRE SAFE REGULATIONS WORKSHOP: FEB 8 DRAFT

FEBRUARY 24, 2021

If you are having trouble with your audio PIN, trying disconnecting any headsets or headphones, calling in, and reconnecting the headset after you've successfully connected to the webinar.

## TODAY'S AGENDA

- Meeting Logistics
- Overview of rulemaking to date
- Errata – errors in rule plead
- Changes we have heard and will make
- Changes requiring Board deliberation
- Public comment



## FIRE SAFE REGULATIONS RECENT & NEAR-FUTURE RULEMAKING



- 2020 saw several revisions to the Fire Safe Regulations:
  - Amended in 2019 via the regular rulemaking process, with an effective date of January 1, 2020
  - Amended in 2020 via the emergency rulemaking process, with an effective date of July 27, 2020
- Emergency Regulations:
  - Addressed the intersection of the housing supply crisis and the wildfire crisis
  - Exempted ADUs and wildfire rebuilds from the Fire Safe Regulations, with some conditions; revised conditions under which delegations of authority may be signed
  - Emergency regulations are in place until the Board replaces them with permanent rulemaking or the regulations expire
  - May be re-adopted while permanent regulations are developed; first re-adoption may be adopted at the Board's April meeting
- 2021 Revisions – Informal Rulemaking:
  - Per statute, the existing Fire Safe Regulations will apply in the LRA VHFHSZ on July 1, 2021.
  - 2021 amendments will apply in SRA and LRA VHFHSZ when they go into effect after the regular/permanent rulemaking process is complete.

## RECENT WORKSHOPS & DRAFTS



- November 18 and 24 – produced December 1<sup>st</sup> draft
- Joint Committee Meeting December 8 – discussed December 1<sup>st</sup> draft
- December 22 – discussed December 1<sup>st</sup> draft
- January 13 and 27 – discussed December 1<sup>st</sup> draft and revisions based on comments received
- February 8 – released new draft proposal
- Dozens of stakeholder meetings, calls, correspondence
  
- Comment letters and emails received to date as well as “questions” from the workshops, workshop recordings, and workshop powerpoints are available to download at <https://calfire.app.box.com/v/firesaferegulations2021>. This link is updated every Friday.

## ERRATA - § 1270.03 SCOPE, PAGE 15, OPTION 3



Error -

- ~~(c) Where Building Construction meets the following criteria, the provisions of this Subchapter shall further apply to any Road or Road Structure that provides Access to the Building Construction: Unless otherwise exempt pursuant to this subchapter, affected activities include, but are not limited to:~~
  - (1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d);
  - (2) application for a change in zoning ~~building permit for new building construction;~~
  - (3) application for a change in use permit; and
  - (4) road construction.

## ERRATA - § 1270.03 SCOPE, PAGE 15, OPTION 3



Corrected -

- ~~(c) Where Building Construction meets the following criteria, the provisions of this Subchapter shall further apply to any Road or Road Structure that provides Access to the Building Construction: Unless otherwise exempt pursuant to this subchapter, affected activities include, but are not limited to:~~
  - (1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d);
  - (2) application for a change in zoning; ~~building permit for new building construction;~~
  - (3) application for a change in use permit; and
  - (4) road construction.

## ERRATA - § 1273.05.02(a) BUILT ROADS, PAGE 4 I



Error -

- (a) Notwithstanding any other provision in this Subchapter, Building Construction, including Building Construction enumerated in § 1270.03(b) and § 1270.03.01(b) and (c), shall not be approved where the Local Roads providing Access to the Building Construction do not provide for at one (1) least fourteen (14) foot Traffic Lane for a distance of at least twenty-two (22) feet for a distance of XX feet.

## ERRATA - § 1273.05.02(a) BUILT ROADS, PAGE 4 I



Corrected -

- (a) Notwithstanding any other provision in this Subchapter, Building Construction, including Building Construction enumerated in § 1270.03(b) and § 1270.03.01(b) and (c), shall not be approved where the Local Roads providing Access to the Building Construction do not provide for at one (1) least fourteen (14) foot Traffic Lane for a distance of at least twenty-two (22) feet every XX feet.

## COMMENTS WE ARE ADDRESSING – ARTICLE I



- Existing definitions:
  - Defensible space (numerous)
  - Driveway & Road (RCRC, LACoFD, residents)
  - Shoulder (RCRC)
- Proposed definitions:
  - Built Roads (numerous)
  - “Developed” and “undeveloped” ridgelines (residents)
- Wildfire rebuilds: clarity regarding what kinds of structure(s) the exemption applies to (numerous)
- Exceptions: clarify language to ensure the exception and appeals processes apply to all who have standing to appeal (Nevada County CDA)
- Greater specificity, clarity regarding scope & applicability

Other definitions may be added/clarified as needed and other comments on Article I may also be addressed after consensus is reached on related topics at today’s workshop.

## ARTICLE I- CRITERIA FOR IMPROVING EXISTING ROADS



- Previous workshops resulted in direction to staff to develop criteria for which a project subject to these regulations must ensure existing roads leading to the project meet the standards in the Fire Safe Regulations
- When a project does meet that criteria, staff were directed to develop criteria for existing roads such that roads below the specific standards in the FSRs but above a certain level of safety could be allowed to implement alternative methods of compliance/mitigation measures rather than meet the FSR requirements.
- Staff proposal:
  - All roads, driveways, etc, new or existing, within the subject project’s perimeter (parcel boundary or subdivision map boundary) shall meet the requirements of the FSRs, but projects of a certain size or type may need to improve existing roads outside the perimeter
  - Presented three options for feedback regarding criteria to improve existing roads

## OPTION 1



### Proposal

- When a subject project requires a tentative and final map, roads providing access to the project must meet fire safety requirements.
- Justification: well-known planning process; tentative maps are required at 5 or more new parcels – about 10 new homes.
- Concerns: does not capture all commercial or industrial projects; could cause confusion with pre-1991 parcel map exemption

### Public Feedback

- Lukewarm reaction
- Some preference for Option 1 in conjunction with other options

## OPTION 2



### Proposal

- Establish a numerical threshold for project size that would trigger the need to improve existing roads
- Justification: would capture projects of all types that increased site occupants
- Concerns: threshold values are arbitrarily decided; may result in project proponents specifically going below project thresholds to avoid compliance

### Public Feedback

- Strong support for this proposal although many concerns raised as well
- Difficult to achieve consensus in rulemaking and potential for inconsistency in application
- Not clear how parcels created by deed recording are addressed
- No consensus on threshold values
  - What those values should be (3 units, 15 units, etc)
  - What kinds of values (square footage, # of site occupants, # of units, ADT added, scaled approach, etc)

## OPTION 3



### Proposal

- Based on current regulations but more specifically identifying projects that increase fire risk:
  - New parcels, excluding lot line adjustments
  - Projects requiring a change in zoning
  - Projects requiring a change in use
  - Road construction
- Justification: based on existing language – closest option to 1991; well-known land use processes that are permitting either an increased risk (additional parcels) or a risk not previously accounted for (changes in zoning or use); covers all construction types
- Concerns: ?

### Public Feedback

- Medium support for this proposal
- May not capture all the construction we are intending to capture (no alternative/preferred language provided from commenters that would address this)
- Can be easily revised to include deed recordings/certificates of compliance
- Regardless of which option is selected, keep exemption for lot line adjustments

Discussion on preferred option?

## ARTICLE I – SUBSTANDARD ROADS & AGGREGATE RISK



- Substandard Road proposal: once a road is below a certain quality, no subject building construction may occur on it until that road is improved (including otherwise exempt construction);
- Aggregate Risk proposal: once a road has reached a cumulative increase in use, no subject building construction may occur on it until that road is improved (including otherwise exempt construction)
- Feedback:
  - Except for RCRC/CSAC/UCC letter, no specific objections to the “substandard roads” proposal (comments & questions did arise regarding the specific road quality thresholds though – we will discuss those in a few minutes)
  - General dissatisfaction with both the concept and specific proposals in the “aggregate risk” section

## AGGREGATE RISK FEEDBACK



- Local government: no resources to conduct these calculations; overly burdensome
- Reasonable goal, but not going to be achieved with this proposal
- Estimated daily trip calculator should use latest ITE Trip Generation Manual numbers (daily trip calculator in Feb 8 draft came from the 2017 National Household Travel Survey, Summary of Trends, Table 3a, USDOT FHWA)
- “Doubling” threshold is undesirable, but no clear consensus on alternatives
- Other offered metrics – tie to parcel size or zoning; scaled approaches; use absolute numbers rather than “doubling”

### Discussion –

Keep this section?

What metrics and thresholds to use?

## COMMENTS WE ARE ADDRESSING – ARTICLE 2



- Consistent use of terminology and defined terms (& throughout the regulations)
- Specifying, where appropriate, when Secondary Access is an appropriate alternative method of compliance
- Removing “plastic” in “flexible plastic posts”
- Clarifications to table with grade requirements and mitigation measures

## COMMENTS FOR DISCUSSION – ARTICLE 2



- Local governments prefer existing dead-end road length standards (1 mile versus new proposal of ½ mile)
  - Preference seems to be based in concern that existing ½ mile+ dead-end roads are no longer buildable.
  - Not the intention of these regulations – could be addressed with clearer language in either Article 1 or 2.
- Nevada County CDA prefers grade allowance up to 25%
  - Only County to specifically request this
  - Current proposal - grades over 16% but less than 20% require additional surfacing; upper limit of 20%
  - Could be addressed by either raising upper limit to 25% or removing upper limit entirely

## § 1273.05.02 “BUILT ROADS”



- Intention: roads that fall below the standards in this section cannot be built on until/unless the road is improved to the standard in this section
  - (a) – sets a floor for road width\*
    - Roads that do not provide 14-ft width for 22-ft at least every \_\_\_ ft
  - (b) – sets a floor for road grade\*
    - Roads that have a grade of >20% over a \_\_\_ linear distance
  - (c) – sets a floor for dead-end road lengths
    - Dead-end roads in LRA VHFHSZ and where the VHFHSZ is mapped in the SRA that are over 1 mile, unless a new through road shortens the length of the dead-end road
  - (d) – sets requirements for roads that are >14ft but <20ft and are of a certain quality
    - If road is 14-ft+ in width, has a non-native surface on 50%+ of its length, and has either turnouts or a 20-ft clear width suitable to serve as a traffic lane, it can be built on
- \*These requirements would be applicable to the otherwise-exempt wildfire rebuilds and ADUs

## § 1273.05.02 “BUILT ROADS”



- Feedback:
  - Change title to “Existing Roads;” define “existing roads” (or “built roads,” whatever term is used)
  - Clean up/reorganization for clarity
  - Residents prefer stricter threshold (20-ft requirement versus 14-ft) but local government and fire agencies prefer greater flexibility, such as requiring more turnouts
  - Nevada County CDA prefers allowable grade up to 25%

### Discussion –

Road standards/thresholds appropriate?

Application to wildfire rebuilds and ADUs?

## COMMENTS WE ARE ADDRESSING – ARTICLE 4



- § 1275.01 Approved Water Supply – align with California Fire Code
- § 1275.02 Definition in Article 1 for Local Fire Authority
- § 1275.04 Municipal Water System Hydrants and Fire Valves – will clarify language to fix potential confusion.
- § 1275.06 Mobile Water Supply (Water Tenders) – 250 gpm for 2 hours is the minimum ISO requirement
- Minor changes to language throughout – will incorporate

## COMMENTS FOR DISCUSSION – ARTICLE 4



- § 1275.00 Application Thresholds – intended to be determined as part of Article I  
**Discussion –**
  - Is the threshold “option” selected in Article I discussion appropriate for these requirements?
  - (Option 1 – subdivision map; Option 2 – numeric thresholds; Option 3 – parcel splits; change in use/change in zoning)
- § 1275.01 Approved Water Supply – structure defense requirements  
**Discussion?**

## COMMENTS WE ARE ADDRESSING – ARTICLE 5



- § 1276.01 Defensible Space definition – addressed in Article I § 1270.01 Definitions
- § 1276.03 Setbacks – Local jurisdiction in consultation with the local fire authority defines strategic ridgelines
- § 1276.03 Ridgelines – Exempt wireless telecom equipment; excluded based on definition of Building Construction in Article I but will make sure this is further clarified if necessary
- § 1276.05. Greenbelts, Greenways, Open Spaces and Parks – add language referencing “as a last resort if evacuation is not possible”

## FURTHER DISCUSSION



- Other comments on Article 5?
- Additional comments generally?
  
- Future opportunities for public feedback and comment:
  - Board meeting March 3 (agenda and registration link at <https://bof.fire.ca.gov/>)
  - Formal rulemaking
  - [Edith.Hannigan@bof.ca.gov](mailto:Edith.Hannigan@bof.ca.gov)

Thank you all for your valuable feedback!

# **EXHIBIT “F”**



## FIRE SAFE REGULATIONS

MARCH 3, 2021  
EDITH HANNIGAN, LAND USE PLANNING PROGRAM MANAGER

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## TODAY'S AGENDA

- Overview of rulemaking to date
- Errata – errors in February 8<sup>th</sup> rule plead
- Summary of February 24 workshop and yesterday's RPC meeting
- Review of proposed changes

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**RECENT WORKSHOPS & DRAFTS**



- November 18 and 24 – produced December 1<sup>st</sup> draft
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- January 13 and 27 – discussed December 1<sup>st</sup> draft and revisions based on comments received
- February 8 – released new draft proposal
- February 24 – discussed February 8<sup>th</sup> draft
- RPC Meeting Mar 2 – discussed February 8<sup>th</sup> draft
- Dozens of stakeholder meetings, calls, correspondence

▪ Comment letters and emails received to date as well as “questions” from the workshops, workshop recordings, and workshop powerpoints are available to download at <https://calfire.app.box.com/v/firesaferegulations2021>. This link is updated every Friday.

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**ERRATA - § 1270.03 SCOPE, PAGE 15, OPTION 3**



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- ~~(c) Where Building Construction meets the following criteria, the provisions of this Subchapter shall further apply to any Road or Road Structure that provides Access to the Building Construction. Unless otherwise exempt pursuant to this subchapter, affected activities include, but are not limited to:~~
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  - (3) application for a ~~change in~~ use permit; and
  - (4) road construction.

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ERRATA - § 1273.05.02(a) BUILT ROADS, PAGE 41



Error -

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ARTICLE I- CRITERIA FOR IMPROVING EXISTING ROADS



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- When a project does meet that criteria, staff were directed to develop criteria for existing roads such that roads below the specific standards in the FSRs but above a certain level of safety could be allowed to implement alternative methods of compliance/mitigation measures rather than meet the FSR requirements.
- Staff proposal:
  - All roads, driveways, etc, new or existing, within the subject project's perimeter (parcel boundary or subdivision map boundary) shall meet the requirements of the FSRs, but projects of a certain size or type may need to improve existing roads outside the perimeter
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ARTICLE I – SUBSTANDARD ROADS & AGGREGATE RISK



- Substandard Road proposal: once a road is below a certain quality, no subject building construction may occur on it until that road is improved (including otherwise exempt construction);
- Aggregate Risk proposal: once a road has reached a cumulative increase in use, no subject building construction may occur on it until that road is improved (including otherwise exempt construction)

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SUMMARY OF WORKSHOP FEEDBACK



- Option 1 – tentative map (captures primarily residential development of 5+ new parcels, approximately 10 new homes)
- Option 2 – numeric thresholds (increase of X number of housing units; increase in X number of occupants on site, etc)
- Option 3 – creation of any new parcels; applications for change in use; applications for change in zoning; road construction (based off existing application language in § 12.70.02(e) Scope)
- Options 1 or 3 (subdivision maps; changes in zoning/use; road construction) are preferred at this time – Option 2 (numerical thresholds) will be investigated for future rulemaking.

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SUMMARY OF WORKSHOP FEEDBACK



- Remove "Aggregate Risk" threshold in this rulemaking but investigate for future updates to the Fire Safe Regulations
- Keeping "Substandard Roads" concept, but revise for clarity




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COMMENTS WE ARE ADDRESSING – ARTICLE 2



- Consistent use of terminology and defined terms (& throughout the regulations)
- Specifying, where appropriate, when Secondary Access is an appropriate alternative method of compliance
- Removing "plastic" in "flexible plastic posts"
- Clarifications to table with grade requirements and mitigation measures
- Keeping 1/2-mile dead end road limit, but adding greater specificity to make sure its clear this limit applies to new dead end roads only
- Upper limits on grade allowances – keeping proposal in February 8<sup>th</sup> draft (20%) but adding greater specificity to make it clear that exceptions may be granted

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§ 1273.05.02 "BUILT ROADS"



- Intention: existing roads that fall below the standards in subsections (a)-(c) cannot be built on until/unless the road is improved to the standard in this section
  - Some of these would apply to otherwise-exempt wildfire rebuilds and ADUs
- Intention: existing roads that are not 20-ft in width but are at least 14-ft and provide mitigations pursuant to subsection (d) may be built on

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§ 1273.05.02 "BUILT ROADS" - SPECIFICS



- (a) – sets a floor for road width\*
  - Roads that do not provide 14-ft width for 22-ft at least every \_\_\_ ft
- (b) – sets a floor for road grade\*
  - Roads that have a grade of >20% over a \_\_\_ linear distance
- (c) – sets a floor for dead-end road lengths
  - Dead-end roads in LRA VHFHSZ and where the VHFHSZ is mapped in the SRA that are over 1 mile, unless a new through road shortens the length of the dead-end road or other mitigation is provided; would be applicable to development on the length of the road exceeding 1 mile
- (d) – sets requirements for roads that are >14ft but <20ft and are of a certain quality
  - If road is 14-ft+ in width, has a non-native surface on 50%+ of its length, and has either turnouts or a 20-ft clear width suitable to serve as a traffic lane, it can be built on
- \*These requirements would be applicable to the otherwise-exempt wildfire rebuilds and ADUs

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**§ 1273.05.02 "BUILT ROADS" – PROPOSALS/DISCUSSION**



**Staff Proposals**

- Move subsection (d) to a new/different section
- Revise 20% upper limit in (b) to 25%

**Board Discussion**

- Limit wildfire rebuilding and ADUs, until/unless road is of a certain width, and below a certain grade %
- In LRA VHFHSZ and SRA VHFHSZ, disallow construction on dead-end roads over 1 mile in length, on the segment of the road exceeding 1 mile, unless mitigation provided

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**ARTICLE 4 – § 1275.00 APPLICATION THRESHOLDS**



- Existing § 1275.01 states
  - "The provisions of this article shall apply in the tentative and parcel map process when new parcels are approved by the local jurisdiction having authority;"
- Suggested revision –
  - "The provisions of this article shall apply to Building Construction in the tentative and final map process."
    - (tentative and final maps are required for 5+ new parcels)

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**ARTICLE 5 - APPLICATION**



- Some sections are relevant to all construction (setbacks, etc) while some are relevant to larger development
- Revise for clarity, review applicable sections to small versus larger scale development
- Proposal – setbacks and preservation of undeveloped ridgelines apply to all construction; other requirements apply in the tentative and final map process




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