



Rancho Santa Fe Fire Protection District

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LANDSCAPE PLAN CHECK CORRECTION

List for Single Family Residences, Duplexes, and Multiple Dwellings

Date: _____ RSF Plan Check# _____

Project Name: _____ Address: _____

Corrections circled are to be made on the plans before Fire Approval will be issued. The approval of plans and specifications does not permit the violation of any section of the Rancho Santa Fe Protection District Fire Code, County Ordinances, or State law. The following list does not necessarily include all errors and omissions.

To facilitate rechecking, please identify, next to each circled item, the sheet of the plans upon which the correction has been made.

RETURN THIS CORRECTION LIST WITH THE CORRECTED PLANS

Note: If new plans are provided when resubmitting, return at least one copy of the original stamped and checked set.

A. PLAN REQUIREMENTS

1. **Landscape Plans are required** to meet Fire District Standards and shall be **approved prior to framing inspection**. Please contact the Fire Prevention Bureau should you have any questions about the standards.
2. Due to the number and/or complexity of corrections, all corrections should be made on the originals and new prints must be run before Fire District sign off will be given.
3. See notes/remarks made on one set of plans. **Return marked set with new/revised sets after you have complied with the requirements on the marked set of plans.** Red marks on plans are part of this comments list.
4. Applicants are required to submit at least two sets of plans, preferably prepared by a licensed Landscape Architect. The plans should at a minimum include the following criteria:
 - A. Provide plans with a readable scale
 - B. Delineation of fuel modification zones with a general description of the zone's dimensions and character (See Site Requirements, paragraph B.3. for details)
 - C. Describe and show existing vegetation on plan
 - D. Designate irrigated areas on the plan
 - E. Include a plant Legend with both botanical and common names for existing and proposed plant material
 - F. Define all symbols and shaded areas, etc. used on the plans
 - G. Draw all plant symbols to 2/3 of what the full mature canopy size will be
 - H. Include quantities of trees and large shrubs being proposed
5. Detailed information regarding Fire District Ordinances and roadway access requirements can be found on the District's web site at: <http://www.rsfire.org>, under fire prevention.

B. PLOT PLAN & SITE REQUIREMENTS

1. **SITE INSPECTION.** Site inspection may reveal conditions which have changed since plan review. When such discrepancies arise, field inspection shall take precedence.

2. **SHOW FIRE HYDRANT LOCATIONS ON PLOT PLAN (§ 507.5.1.1).** Fire hydrants shall be installed in accordance with **Fire Code Sec. 508.5.1.1**. A 3-foot clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved
3. **INDIVIDUAL DRIVEWAY DIMENSIONS (§ 503.2.1 (NOTE ON THE PLAN)).** Fire apparatus access roads shall have an unobstructed improved width of not less than 24 feet, except for single-family residential driveways; serving no more than two single-family dwellings, shall have a minimum of 16 feet of unobstructed improved width. **All fire apparatus access roads shall have an unobstructed vertical clearance of no less than 13 feet 6 inches.**

EXISTING ROADS FOR – NEW, REMODELS, ADDITIONS, OR RELOCATED SINGLE FAMILY DWELLINGS PHASING POLICY

The fire access roadway requirement for widening existing improved fire apparatus roadway shall be per § 503.2.1.1 **TABLE 1 – PHASING POLICY - Fire Apparatus Access** and will extend from the property out to the nearest public road.

§ 503.2.1.1 TABLE 1 - PHASING POLICY- Fire Apparatus Access – Single Family Dwellings

Number of Parcels	Unobstructed Road width	Roadways Over 600 foot Long	Extend to Nearest Public Road
1-2	16-foot, paved	Turnouts every 400-feet	Yes
3-8	20-foot, paved	Turn-outs every 400-feet	Yes
9 or more	24-foot, paved	Not required	Yes

Auxiliary structures (non-habitable) and residential additions/remodels less than 500 square feet- The access roadway will not be required to be improved if the access roadway has already been improved to a minimum width of 20 feet. If the roadway is not 20 feet, then the roadway shall be widened per “TABLE 1 – PHASING POLICY - Fire Apparatus Access”, but not greater than 20 feet. The preceding addition/remodel exception is limited to one permit (addition or remodel) per three-year period from the date of the last permit approval.

4. **GATES (§ 503.6) (NOTE ON THE PLAN)** All gates or other structures or devices which could obstruct fire access roadways or otherwise hinder emergency operations are prohibited unless they meet standards approved by the Chief and receive Specific Plan approval. **Gates shall have a 30-foot setback from main road.**
5. **KEY BOXES AND SWITCHES (§506.1) (NOTE ON THE PLAN).** When access to or within a structure or an area is unduly difficult because of secured openings or where immediate access is necessary for life saving or firefighting purposes, the Chief is authorized to require a key box to be installed in an accessible location. (Knox key/switch box application is available at front desk)
6. **THE ANGLE OF DEPARTURE AND ANGLE OF APPROACH (§ 503.2.7).** The angle of departure and angle of approach of a fire access roadway shall not exceed 7 degrees or 12 percent or as approved by the Chief.
7. **TURNING RADIUS (§ 503.2.4).** The turning radius of a fire apparatus access road shall be 28 feet or as approved by the Chief. (Fire Code Sec. 902.2.3.)
8. **GRADE (§ 503.2.7) (SHOW ON PLANS)** The gradient for a fire apparatus access roadway shall not exceed 20.0%. Grades exceeding 15.0% (incline or decline) shall not be permitted without mitigation. Minimal mitigation shall be the installation of a surface of Portland cement concrete (PCC), with a heavy-broom (rake) finish, perpendicular to the direction of travel to enhance traction.
9. **SURFACE (§ 503.2.3) (NOTE ON THE PLAN).** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 lbs.) and shall be provided with an approved paved surface so as to provide all-weather driving capabilities.
10. **STREET NUMBERS (§ 505.1) (NOTE ON THE PLAN)** Approved numbers and/or addresses shall be placed on all new and existing buildings and at appropriate additional locations as to be plainly visible and legible from the street or roadway fronting the property from either direction of approach. Said numbers shall contrast with their background, and shall meet the following minimum standards as to size: 4" high with a 3/8" stroke for residential buildings, post at roadway.

11. **SET BACKS FROM TOP OF SLOPE (§ 4907.1.3).** Set backs for all structures is 15 feet from top of slope for single story and 30 feet for two stories (Based upon 2:1 slope; 12 feet is considered one story).
12. **FIRE APPARATUS ACCESS ROADS (§ 503.1).** All fire access roads, including private residential driveways, shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from the closest point of Fire District vehicle access.
13. **HOSE PULL REQUIREMENTS (§ 503.1.1)** All structures must have an acceptable hose pull of 150 feet from either side of the fire apparatus access road. This means a 300 foot range must be measured around the entire structure. A four (4) foot wide path must be kept clear around structures in order to assure that a hose pull may be accessible.
14. **ROADWAY DESIGN FEATURES (§ 503.4.1).** Roadway design features (speed bumps, speed humps, speed control dips, etc.), which may interfere with emergency apparatus responses, shall not be installed on fire access roadways, unless they meet design criteria approved by the Chief
15. **BRIDGES (§ 503.2.6 and AASHTO HB 17) (NOTE ON THE PLAN).** When a bridge is required to be used as part of a fire apparatus access road, it shall be constructed and maintained in accordance with nationally recognized standards.
16. **DEAD ENDS (§ 503.2.5).** Fire apparatus roads, including private driveways, more than 150 feet in length shall be provided with an approved means for turning the fire apparatus around. **Clearly show the turnaround on the plan.**
17. **FUEL MODIFICATION (§ 4907.2).** Maintain an effective fuel modification zone by removing, clearing away or modifying combustible vegetation and other flammable materials from areas within 100 feet from combustible buildings or structures. While these standards will provide a high level of protection to structures built in the wildland/Urban Interface zone, **there is no guarantee or assurance that compliance with these standards will prevent damage or destruction of structures by fire in all cases.**

NOTE THE FOLLOWING FUEL MODIFICATION REQUIREMENTS ON THE PLANS:

- A. The minimum fuel modification around combustible structures is 100 feet. All zone dimensions are measured on a horizontal plane projecting outward from a combustible structure. A fuel modification area is divided into two, 50-foot wide zones:
 - I. The first zone includes the area from the building to a point 50 feet away. This zone must be modified and planted with drought-tolerant, fire resistive plants (See Section D, below, for additional requirements). Grass and other vegetation located more than 50 feet from buildings or structures and less than 6 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion. Irrigation required.
 - II. The second zone or thinning zone is the area between 50 to 100 feet from the building. In this zone the native vegetation may remain, but all native, unbroken vegetation must be thinned out by 50 percent canopy cover. All dead and dying vegetation in addition to undesirable plants and weeds as listed in the Wildland/Urban Interface Development Standard must be removed. Irrigation is optional.
- B. All access roadways require a minimum 30-foot wide fuel modification zone on both sides of the road or driveway. This fuel modification zone can be either thinned out to an acceptable level or completely replanted with ornamental vegetation that is permanently irrigated.
- C. **Offsite Fuel Modification requirements.** Where the 100 feet required fuel modification extends onto neighboring property(s), Owner shall obtain written permission from the neighbor(s). This letter(s) shall state the responsibilities of all parties relative to the establishment and maintenance of the fuel modification area. This agreement shall be recorded with the County Recorder's Office and a copy provided to the Fire District before final inspection.
- D. All fuel modification work shall be completed before final inspection (NOTE ON PLAN).**

- C. **LANDSCAPING REQUIREMENTS (§ 4907.5.2) (NOTE ALL REQUIREMENTS ON PLANS).** All plant materials used shall be from the Wildland/Urban Interface Development Standards plant palette, which can be found on the Fire District's web site. The addition of plant material to the approved list will be at the discretion of the Fire District. Landscape plans shall be in accordance with the following criteria:

1. All non-fire resistive trees, including conifers (e.g., Pines, Junipers, and Cypress), pepper trees, eucalyptus species, certain palms with fibrous tissues, bamboo species, and acacia species, shall be planted and maintained so that the tree's drip line *at maturity* is a minimum 30 feet from any combustible structure. All fire resistive tree species shall be planted and maintained at a minimum of 10 feet from the tree's drip line to any combustible structure.
2. For streetscape plantings, all non-fire resistive trees shall be planted so that the center of the tree trunk is 20 feet from edge of curb; fire resistive trees can be planted 10 feet from edge of curb to center of tree trunk. Care should be given to the type of tree selected that will not encroach into the roadway, nor produce a closed canopy effect.
3. Limit planting of large unbroken masses especially trees and large shrubs. Groups should be two to three trees maximum, with mature foliage of any group separated horizontally by at least 10 feet, if planted on less than 20 percent slope, and 20 feet, if planted on 21 to 40 percent slope, and 30 feet, if planted on greater than 41 percent slope.
4. If shrubs are located underneath a tree's drip line, the lowest branch should be at least three times as high as the understory shrubs or 10 feet, whichever is greater.
5. Combustible ground covers such as wood chips or mulch, shall not be any closer than 12 inches to any structure.
6. Existing trees can be pruned 10 feet away from roof, eave, or exterior siding, depending on the tree's physical or flammable characteristics and the building construction features.
7. All tree branches and palm fronds shall be removed within 10 feet of a fireplace chimney or outdoor barbecue.
8. ***All landscaping shall be installed before final inspection.***

D. ORCHARDS, GROVES OR VINEYARDS (§ 4907.3.2) (NOTE ALL REQUIREMENTS ON PLANS). Maintenance of irrigated orchards, groves or vineyards shall include, but not limited to, the following:

1. The tree canopies have no dead branches or foliage.
2. The removal of dead, dying or diseased trees (excluding tree stumps no higher than six inches above the ground).
3. All dry grasses mowed or disked to bare soil.
4. The orchard is free of combustible debris, flammable brush or other materials which can be dangerous to property and to the health, safety, and welfare of residents.
5. A 10-foot wide firebreak shall be cleared around the perimeter of all orchards, groves or vineyards.
6. Items 1 through 4 shall be removed from the property and disposed of all such matter in a lawful manner.
7. Irrigation system shall be functional and routinely maintained at all times.
8. All trees must at least be 15 feet on center.

E. EUCALYPTUS FORESTS AND OAK WOODLANDS (§ 4907.5.4) (NOTE ALL REQUIREMENTS ON PLANS). All forests and woodlands shall be kept in a healthy state and maintained as described below:

1. The forest or woodlands shall be free of all dead, dying or diseased trees (excluding tree stumps no higher than six inches above the ground). Dead, dying or diseased trees shall include insect infested trees, no longer living, in the last stages of growth or infected by a pathogen of any type.
2. If combustible vegetation is located underneath a tree's dripline, the lowest branch should be at least three times as high as the understory brush or grasses, or ten feet, whichever is greater. This will reduce the build-up of "ladder" fuels.
3. Firewood shall be neatly stacked and shall have a minimum of 30 feet of clearance (no vegetation) around the entire firewood storage area.
4. Debris and trimmings produced by the removal process shall be removed from the site, or if left, shall be converted into mulch by a chipping machine and evenly dispersed to maximum depth of six inches.

F. ADDITIONAL REQUIREMENTS.

1. **LOCATION OF LIQUEFIED PETROLUUM GAS TANK, ABOVE GROUND STORAGE (§Table 6104.3) (SHOW LPG TANK LOCATION ON PLAN).** Minimum separation between containers and buildings, public ways, or lines of adjoining property that can be built upon is: 10 feet for containers 125 gallons to 500 gallons; 25 feet for containers 501 to 2,000 gallons (Fire Code Article 82, Table 8204-A – Location of Containers). **Weeds, grass, shrubs, overhanging tree branches, trash, and other combustible materials shall be kept not less than 10 feet from LP-gas tanks or containers (Fire Code 3807.3).**
2. **SPARK ARRESTERS (§ 603.6.6).** All structures having any chimney, flue, or stovepipe attached to any fireplace, stove, barbecue, or other solid or liquid fuel burning equipment and devices, shall have such chimney, flue, or stovepipe equipped with an approved spark arrester.

3. **FIREWOOD STORAGE (§ 320.1).** All firewood shall be neatly stacked and stored 30 feet from all structures and separated from the crown of trees by a minimum of 15 feet, measured horizontally. Additionally, all flammable vegetation and combustible materials shall be cleared or removed within 30 feet of the firewood stacks.
4. **FIRE PITS (§ 307.4.2).** Natural gas-fired pits shall not be located within 10 feet of combustible walls or roofs or other combustible materials or vegetation. Wood burning fire pits shall not be located within 25 feet of combustible walls or roofs or other combustible materials or vegetation.
5. **Fences and Other Attachments to Structures (§ 4905.4).** The first five feet of fences and other items attached to a structure shall be constructed of non-combustible material or pressure-treated exterior fire-retardant wood.
6. **Attached or Portable Awnings (Local Policy).** All awnings attached to any structure shall meet the 15-foot structure setback requirement and be identified as fire rated. Additionally, the awning shall be contained in a metal, self-enclosing or box-protected cover. Portable awnings shall have UL Approved Fire Retardant Rating and be no closer than 20 feet from any combustible structure. The canvas awnings for playground equipment shall be identified and maintained, annually, as fire retardant.
7. **Solar Panels (§ 605.11).** Solar panels located less than 20 feet to a combustible structure shall have a metal frame, otherwise the size and type of materials of the panels placed on a roof top shall comply with class "A" roof assembly and materials requirements. A clear, brush-free area of 20 feet shall be required for ground-mounted photovoltaic arrays.
8. **Trash Enclosures (Local Policy).** Trash enclosures or trash can storage shall be located at least 10 feet or more from any structure. A trellis or roof over the trash enclosure shall be non-combustible or made of heavy timber construction (minimum 4 inches X 4 inches).
9. **Construction Material (§ 4905.4).** Any exposed wood members used for outdoor construction must be a minimum size of 4" x 4" or an approved fire resistive material. See the County of San Diego's website for approved material.
10. **Thatched Roof Palapas (Local Policy).** All palapas with thatched roof shall be at a minimum 30 feet from any combustible structure. Roofing materials shall be applied with a fire retardant chemical. Proof of application and UL rating of fire retardant chemical shall be provided to Fire District prior to installation of palapa.
11. **Ornamental Grasses (Local Policy).** All ornamental grasses must be kept 10 feet from any combustible structure or on the opposite side of the 4 foot wide pathway for hose pull purposes.

G. RE-SUBMITTAL INSTRUCTIONS.

- Call Plan checker, listed below, to arrange for a recheck appointment.
- Corrected plans are to be logged-in for recheck.
- A **Site Plan** is required with re-submittal.

Plan Checker: Conor Lenehan

Phone Number: (858) 756-6006
