PASS / RESUBMIT

Rancho Santa Fe Fire Protection District

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Web Site: www.rsf-fire.org

FIRE PLAN CHECK CORRECTION

List for Single Family Residences, Duplexes, and Garages

Date: _____ County Plan Check #: _____ 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. **Two sets of County Red stamped original building plans** and a completed County mitigation form.
2. Due to the number and/or complexity of corrections, before Fire sign-off will be given, corrections should be made on the originals and run new prints.
3. Corrections can **NOT** be made on stamped plans. **NO RED Ink** or clouding is allowed.
4. Identify rooms and specify use.
5. Define all symbols and shaded areas, etc. used on the plans.
6. 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.
7. The Fire District will require the following conditions be placed on the project: Detailed information regarding Fire District Ordinances can be found on the District's web site at: http://www.rsf-fire.org/prevention, under fire prevention.
8. Unless a specific code is given; all codes referenced by Sections are from The County of San Diego's 2011 Consolidated Fire Code and Rancho Santa Fe Fire Protection District Ordinance 2014-01.

B. PLOT PLAN & SITE REQUIREMENTS:

_____ 1. **SITE INSPECTION** may reveal conditions which have changed since plan review. When such discrepancies arise, field inspection shall take precedence. **(Note on plot plan)**. [RSFFPD: if not noted, use our stamp]

_____ 2. **SHOW FIRE HYDRANT LOCATIONS ON PLOT PLAN (§ 507.5.1.1) (Show location of hydrant on plot plan):** Group R-3 and U Occupancies: An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into or within the jurisdiction. When any portion of the facility or building protected is in excess of 500 feet (152 900 mm) from a water supply on a public street, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required flow shall be provided when required by the Fire code official.

EXCEPTION: Remodels and additions: Existing structures which are remodeled or added to where the amount of new area does not exceed 1,500 square feet and the additional or remodeled area is protected with an approved automatic fire extinguishing system.
In zones other than industrial, commercial and multi-family fire hydrants shall be installed in accordance with Table No. 507 .5.1.1A.

Section 507.5.1.1 - Table No. 507 .5.1.1A

Parcels ½ acre and larger:	Every 500 feet to the structure
Parcels less than ½ acre:	Every 350 feet to the structure

_____ **3. ROAD PHASING REQUIREMENT FOR EXISTING PARCELS (§. 503.2.1.1):** Road Phasing Policy- For Single Family Dwellings on Existing Legal Parcels**.** The fire access roadway requirement for widening existing improved fire apparatus roadway shall be per TABLE 503.2.1.1A – PHASING POLICY - Fire Apparatus Access will extend from the property out to the nearest public road.

TABLE 503.2.1.1A - 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 503.2.1.1A – 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 plot plan.):** No person shall install a security gate or security device across a fire access roadway without the fire code official's approval. All gates providing access from a road to a driveway shall be located a minimum of 30 feet from the nearest edge of the roadway and the driveway width shall be 36 feet wide at the entrance on roadways of 24 feet or less of the traffic lane(s) serving the gate. An automatic gate across a fire access roadway or driveway shall be equipped with an approved emergency key-operated switch overriding all command functions and opening the gate. A gate accessing more than four residences or residential lots or a gate accessing hazardous institutional, educational or assembly occupancy group structure, shall also be equipped with an approved emergency traffic control-activating strobe light sensor or other device approved by the fire code official, which will activate the gate on the approach of emergency apparatus with a battery back-up or manual mechanical disconnect in case of power failure. An automatic gate shall meet fire department policies deemed necessary by the fire code official for rapid, reliable access. An automatic gate serving more than one dwelling or residential lot in existence at the time of adoption of this chapter is required to install an approved emergency key-operated switch or other mechanism approved by the fire code official, at an approved location, which overrides all command functions and opens the gate. A property owner shall comply with this requirement within 90 days of receiving written notice to comply. Where this section requires an approved key-operated switch, it may be dual-keyed or equipped with dual switches provided to facilitate access by law enforcement personnel. Electric gate openers, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

_____ **5. KEY BOXES (§ 506.1) (Note on the plot 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 Fire code official is authorized to require a key box to be installed in an accessible location. The key box shall be a type approved by the fire code official and shall contain keys to gain necessary access as required by the fire code official.

_____ **6. MARKING, FIRE APPARATUS ROADS (§ 503.3) (Note on plot plan):** When required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and is replaced or repaired when necessary to provide adequate visibility. All new public roads, all private roads within major subdivisions and all private road easements serving four or more parcels shall be named. Road name signs shall comply with County of San Diego Department of Public Works Design Standard #DS-13.

_____ **7. EMERGENCY KEY ACCESS (§506.1.3) (Note on the plot plan):** An automatic gate across a fire access roadway or driveway shall be equipped with an approved emergency key-operated switch overriding all command functions and opening the gate. A gate accessing more than four residences or residential lots or a gate accessing hazardous institutional, educational or assembly occupancy group structure, shall also be equipped with an approved emergency traffic control-activating strobe light sensor or other device approved by the fire code official, which will activate the gate on the approach of emergency apparatus with a battery back-up or manual mechanical disconnect in case of power failure.

_____ **8. TURNING RADIUS (§ 503.2.4) (Show on plot plan):** The turning radius of a fire apparatus access road shall comply with the County public and private road standards approved by the Board of Supervisors. The turning radius for a private residential driveway shall be a minimum of 28 feet, as measured on the inside edge of the improvement width or as approved by the fire code official.

_____ **9. DEAD ENDS-TURNAROUNDS (§ 503.2.5) (Show turnaround on plot plan):** All dead-end fire access roads in excess of 150 feet in length shall be provided with approved provisions for turning around emergency apparatus. A cul-de-sac shall be provided in residential areas where the access roadway serves more than two structures. The minimum unobstructed paved radius width for a cul-de-sac in a residential area shall be 36 feet. The fire code official shall establish a policy identifying acceptable turnarounds for various project types. Please see alternative turnaround designs for single family residences.

_____ **10.GRADE (§ 503.2.7) (Note on the plot plan what the grade is)**: The gradient for a fire apparatus access roadway shall not exceed 20.0%. Grades exceeding 15.0% shall not be allowed without mitigation measures. The fire code official may require additional mitigation measures where he deems appropriate. The angle of departure and angle of approach of a fire access roadway shall not exceed 7 degrees (12 percent) or as approved by the fire code official.

_____ **11.SURFACE (§503.2.3) (Note on the plot plan proposed material):** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus not less than 75,000 lbs. unless authorized by the FAHJ and shall be provided with an approved paved surface as to provide all-weather driving capabilities.

_____ **12.DIMENSIONS (§ 503.2.1) (Note on the plot plan.):** (A) 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, which shall have a minimum of 16 feet of unobstructed improved width. Any of the following, which have separated lanes of one-way traffic: gated entrances with card readers, guard stations or center medians, are allowed, provided that each lane is not less than 14 feet wide.(B) All fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches. Vertical clearances or road widths shall be increased when, in the opinion of the fire code official, vertical clearances or road widths are not adequate to provide fire apparatus access.

Exception: Upon approval of the fire code official, vertical clearances or road width may be reduced as long as the reduction does not impair access by fire apparatus. In cases where the vertical clearance has been reduced approved signs shall be installed and maintained indicating the amount of vertical clearance.

_____ **13. ADDRESS NUMBERS (§ 505.1) (Note on the plot 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 1/2 " stroke for residential buildings, 6" high with a ½" stroke for commercial and multi-residential buildings, 12" high with a 1" stroke for industrial buildings. Additional numbers shall be required where deemed necessary by the Fire Marshal, such as rear access doors, building corners, and entrances to commercial centers. The Fire code official may establish different minimum sizes for numbers for various categories of projects.

_____ **14. EASMENT ADDRESS SIGNS (§ 505.3): (Note on plot plan)** All easements, which are not named differently from the roadway, from which they originate, shall have an address sign installed and maintained, listing all street numbers occurring on that easement, located where the easement intersects the named roadway. Minimum size

of numbers on that sign shall be 4 inches in height with a minimum stroke of 3/8", and shall contrast with the background.

_____ **15. HOSEPULL- FIRE APPARATUS ACCESS ROADS (§ 503.1) (Show path of travel for hosepull on plot plan)**: **General Fire apparatus 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 department vehicle access. Fire apparatus access roads, including private residential driveways more than 150 feet in length, shall be provided and maintained in compliance with this section and the most recent edition and any amendments thereto, of public and private road standards as adopted by the County of San Diego (San Diego County Standards for Private Roads and Public Roads, San Diego County Department of Public Works). The fire code official may modify the requirements of this section if the modification provides equivalent access.

_____**16. BRIDGES AND ELEVATED SURFACES (§ 503.2.6) (Note on the plot plan.):** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits and vertical clearance limitations shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official.

_____**17.BRIDGES WITH ONE WAY TRAFFIC (503.2.6.1):** When approved by the Fire Code Official, private bridges providing access to not more than two residential dwellings may be allowed with one 12 foot wide travel lane; however it shall provide for unobstructed visibility from one end to the other and turnouts shall be provided at both ends.

_____**18.TRAFFIC CALMING DEVICES (§ 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 fire code official.

_____**19.RESPONSE MAP UPDATES (§ 505.5)**: Any new development, which necessitates updating of emergency response maps by virtue of new structures, hydrants, roadways or similar features, shall be required to provide map updates in a format (PDF and/or CAD format as approved by the FAHJ) or compatible with current department mapping services, and shall be charged a reasonable fee for updating all response maps.

_____ **20.FUEL MODIFICATION (§ 4907.2) (Note on the plot plan):** A fuel modification zone shall be required around every building that is designed primarily for human habitation or use or a building designed specifically to house farm animals. Decks, sheds, gazebos, freestanding open-sided shade covers and similar accessory structures less than 250 square feet and 30 feet or more from a dwelling, and fences more than five feet from a dwelling, are not considered structures for the establishment of a fuel modification zone. A fuel modification zone shall comply with the following:

> **Zone A-** When a building or structure in a hazardous fire area is located 100 feet or more from the property line the person owning or occupying the building or structure shall maintain a fuel modification zone within 100 feet of the building or structure. The area within 50 feet of a building or structure shall be cleared of vegetation that is not fire resistant and re-planted with fire-resistant plants. In the area between 50 to 100 feet from a building all dead and dying vegetation shall be removed.
> **Zone B-** Native vegetation may remain in this area provided that the vegetation is modified so that combustible vegetation does not occupy more than 50% of the square footage of this area. Weeds and annual grasses to be mowed to a height of 4" to 6". Any chipping that is done on site should be spread not to exceed 6" in height. Trees may remain in both areas provided that the horizontal distance between crowns of adjacent trees and crowns of trees and structures is not less than 10 feet.

There is no guarantee or assurance that compliance with these standards will prevent damage or destruction of structures by wildland fire in all cases.

_____ **21. STRUCTURE SET BACK FROM SLOPE (§ 4907.1.3) (Identify top of slope on plot plan):** A single story structure shall be setback a minimum 15 feet horizontally from top of slope to the farthest projection of the structure. A single story structure shall be less than 12 feet above grade. A two- story structure shall be setback a minimum of 30 feet measured horizontally from top of slope to the farthest projection from the structure. Roof aspect will be taking into consideration. Structures greater than two stories may require greater setback, which is based upon a 2-to1 slope.

_____ **22. GENERAL SETBACKS (§ 4907.1.1) (Show All Setbacks and Property Lines):** All structures shall be set back a minimum of 30 feet from all property lines and open space easements unless the County Zoning Ordinance requires a greater setback.

Exception: When both the building official and the FAHJ determine that the hazard from wildfire is not significant or when the terian, parcel size or other constraints on the parcel make the required setback infeasible, the building official may allow the setback to be less than 30 feet from the property line when allowed by the Zoning Ordinance.

_____ **23. LANDSCAPE SUBMITTALS (§ 4907.5.1) (Note on the plot plan):** Landscape Plans are required for all residential custom homes, production tract homes, multi-family residential and commercial buildings. Landscape plans shall be submitted and approved by the Fire District ***prior to the framing inspection***. Landscape plan submittals shall include, at a minimum, a readable scale, the delineation of 100-foot fuel modification zone, the existing vegetation, and all irrigated areas, a plant legend with both botanical and common names and identify all plant material symbols.

_____ **24. LANDSCAPING AND FUEL MODIFICATIONS (§ 4907.5.5) (Note on the plot plan):** All landscaping shall be installed prior to the final inspection for issuance of certificate of occupancy.

_____ **25. LOCATION OF LPG TANK, ABOVE GROUND STORAGE (CA Fire Code, Table 3804.3) (Note on the plot plan.):** The 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. All combustible vegetation shall be located 10 feet away from tanks.

C. BUILDING CONSTRUCTION AND FEATURES

_____ **1. FIRE SPRINKLERS (§ 903.2) (Note on the plot plan)**: Approved automatic Fire sprinkler systems are required in all new structures. For the purpose of fire-sprinkler systems, buildings separated by less than ten (10) feet from adjacent buildings shall be considered as one building. Fire barriers, partitions and walls, regardless of rating, shall not be considered as creating separate buildings for purposes of determining fire sprinkler requirements. Mezzanines shall be included in the total square footage calculation.

_____ **2. AUTOMATIC FIRE SPRINKLERS - ADDITONS (§ 903.2.2.1):** an automatic sprinkler system installed in accordance section 903.2 may be required to be installed throughout structures when the addition is more than 50% of the existing building or when the altered building will exceed a fire flow as calculated per section 507.3. The fire code official may require an automatic sprinkler system be installed in buildings where no water main exists to provide the required fire flow or where a special hazard exists such as: poor access roads, grade and canyon rims, hazardous brush and response times greater than 5 minutes by a fire department. When Fire Sprinklers are required under additions this shall meet the entire structure or structures shall be equipped with fire sprinklers. The Fire code official may require that other protective measures be taken based on existing conditions and/or potential hazards.

EXCEPTION:
(1) Group U occupancies not greater than 500 square feet, when building lies more than 20 feet from an adjacent structure or property line.
(2) Accessory buildings/barns not greater than 1000 square feet, and not otherwise considered enclosed buildings/structures, which are of ignition resistant construction or as determined by the Chief to not present a significant fire hazard.
(3) Agricultural buildings constructed of wood or metal frames, over which fabric or similar material is stretched, which are specifically used as green houses are exempt from the automatic sprinkler requirements unless physically connected to other structures.

_____ **3. AUTOMATIC FIRE SPRINKLERS – REMODELS OR RECONSTRUCTIONS (§ 903.2.2.2):** An automatic sprinkler system installed in accordance section 903.2.1 may be required if the scope of work includes significant modification to the interior or roof of the building, and the cost of installation of an automatic sprinkler system does not exceed 15 percent of the construction costs of the remodel. When Fire Sprinklers are required under remodels and reconstructions this shall mean the entire structure or structures shall be equipped with fire sprinklers. The fire code official may require that other protective measures be taken based on existing conditions and/or potential hazards.

_____ **4. SPRINKLER SYSTEM MONITORING AND ALARMS (§ 903.4) (Note on plot plan):** Automatic sprinkler systems with 100 sprinkler heads or more protecting one- and two-family dwellings shall be monitored.

_____ **5. ROOFING COVERING & Valleys (§4905.4) (Note on the plot plan):** Class "A" Very High Fire Hazard Areas

a) Roof gutters –Prevent debris accumulation
b) Replacement – more than 50% or more 2,500 square feet roof area

_____ **6. ATTIC VENTILATION (§ 4905.4) (Note on the plot plan and roof plan):** Prevent intrusion of flame and embers (ember resistant "ER" approved models only) into the attic.

_____ **7. EAVE OR CORNICE VENTS (§ 4905.4) (Note on plot plan):** not allowed in exterior overhang areas

a) Eave protection –shall be protected by ignition resistant materials

_____ **8. SPARK ARRESTERS (§ 603.6.6) (Note on the plot plan.):** All structures having a chimney, flue or stovepipe attached to a fireplace, stove, barbecue or other solid or liquid fuel burning equipment or device shall have the chimney, flue or stovepipe equipped with an approved spark arrester. An approved spark arrester is a device intended to prevent sparks from escaping into the atmosphere, constructed of welded or woven wire mesh, 12 gauge thickness or larger, with openings no greater than ½ inch, or other alternative material the FAHJ determines provides equal or better protection.

_____ **9. GLAZING MATERIALS (§ 4905.4) (Note in actual window schedule for EVERY window):** One pane tempered on dual pane windows

_____ **10. VINYL WINDOWS (CBC 704A.3.2.2)** must meet the following characteristics:
a. Frame and sash are comprised of vinyl material with welded corners
b. Metal reinforcement in the interlock area.
c. Glazed with insulating glass, annealed or tempered
d. One pane tempered of dual pane window(s)

_____ **11. SKYLIGHTS (§ 4905.4) (Note in window schedule):** One pane tempered Glass

_____ **12. EXTERIOR WALLS (§ 4905.4):** Shall be noncombustible, ignition-resistant materials

b) Exterior wall covering – shall extend from the top the foundation and terminate at roof
c) Repair/Replacement of exterior wall –less than 30 feet from property line
d) Exterior wall Vents - prevent intrusion of flame and embers into the structure

_____ **13. EXTERIOR DOORS (§ 4905.4):** Approved noncombustible construction or 20 minute rated

_____ **14. COMBUSTIBLE FENCES AND OTHER COMBUSTIBLE ATTACHMENTS TO STRUCUTURES (§ 4905.4) (Note on plot plan):** Fences and other structures less than five from a building – non-combustible

_____ **15. SMOKE DETECTORS (§ 907.2.11.4) (Note on the plot plan and electrical sheets):** In new construction and in newly classified Group R-3.1 occupancies, required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than those required for over current protection. Smoke alarms may be solely battery operated when installed in existing buildings; or in buildings without commercial power; or in buildings, which undergo alterations, repairs, or additions regulated by Section 907.2.11.5 .

_____ **16. ADDITIONS, ALTERATIONS OR REPAIRS TO GROUP R OCCUPANCIES (§ 907.2.11.4.1) (Single Family Dwelling):** When the valuation of an addition, alteration, or repair to a Group R occupancy exceeds $1,000 and a permit is required, or when one or more sleeping rooms are added or created in existing Group R occupancies, smoke alarms shall be installed in accordance with Section 907.2.11.

_____ **17. CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE (§ 4905.4) (Note on plot plan): Wildland Urban Interface Special Building Construction Regulations** are located in the 2013 California Building Code and amendments for the County of San Diego for the following construction features:

a) SFM Standard 12-7A-1 Exterior Wall Siding and Sheathing
b) SFM Standard 12-7A-2 Exterior Windows
c) SFM Standard 12-7A-3 Horizontal Projections
d) SFM Standard 12-7A-4 Decking
e) SFM Standard 12-7A-5 Ignition-resistant Materials

ADDITIONAL REQUIREMENTS, sheet(s) attached:

❑ **Corrected sheets and plans are to be logged-in for recheck.**

❑ **Call Plan checker, listed below, to arrange for a recheck appointment.**

Plan Checker: _____Phone Number: _____Date:_____