PASS / RESUBMIT

Rancho Santa Fe Fire Protection District

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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 2009 Consolidated Fire Code and Rancho Santa Fe Fire Protection District Ordinance 2008-01 and 2008-02.

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 (Consolidated Fire Code § 508.5.1.1)** Fire Hydrants shall be installed as required by the Fire Chief, using the following criteria and taking into consideration departmental operational needs. Hydrants shall be located at intersections, at the beginning radius of cu-de-sacs and at intervals identified in the following table and criteria. Hydrants located across heavily traveled roadways shall not be considered as serving the subject property.

Table 508.5.1A In zones other than industrial, commercial and multi-family fire hydrants shall be installed in accordance with Section 508.5.1.1.2	
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 NEW SINGLE FAMILY DWELLINGS (Consolidated Fire Code §. 503.2.1.1):** The Fire Access Roadway Requirement for widening an existing, improved and paved Fire Apparatus Roadway shall be as provided in Table 503.2.1.1. The Fire Access Roadway shall be constructed to extend from the property line to the nearest public road.

TABLE 503.2.1.1 - 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

The access roadway shall not be required to be improved for a non-habitable accessory structure or a residential addition or remodel less than 500 square feet if the access roadway has already been improved and paved to a minimum twenty (20) feet. If the roadway is less than twenty (20) feet, the roadway shall be widened to twenty (20) feet. The preceding addition or remodel exception is limited to one (1) permit addition or remodel per three-year (3) period from the date of the last permit approval.

4. **GATES (§ 503.6) (Note the following 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. 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. (Refer to the Code for gates serving four (4) or more residences and hazardous institutional, educational or assembly occupancies).

5. **EMERGENCY KEY ACCESS (§ 506.1.2):** All central station–monitored fire detection systems and fire sprinkler systems shall have an approved emergency key access box on site in an approved location. The owner or occupant shall provide and maintain current keys for any structure for fire department placement in the box and shall notify the fire department in writing when the building is re-keyed.

6. **TURNING RADIUS (§ 503.2.4)** The turning radius of a fire apparatus access road shall be 28 feet or as approved by the Chief.

7. **DEAD ENDS (§ 503.2.5):** 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 (2) structures. The minimum unobstructed paved radius width for a cul-de-sac in a residential area shall be thirty-six (36) feet. The Fire Code Official shall establish a policy identifying acceptable turnarounds for various project types.

8. **GRADE (§ 503.2.7) (Note the following on the plot plan.)**: **The gradient for a Fire Apparatus Access Roadway shall not** exceed twenty percent (20.0%). Grades exceeding fifteen percent (15.0%) (incline or decline), shall not be permitted without mitigation measures. Minimal mitigation shall be the installation of a fire sprinkler system and a surface of Portland cement concrete (PCC), with an approved rough finish, perpendicular to the direction of travel to enhance traction. The Fire Code Official may require additional mitigation measures where he/she deems appropriate. The angle of departure and angle of approach of a Fire Access Roadway shall not exceed seven (7) degrees or (12 percent) or as approved by the Fire Code Official.

9. **SURFACE (§ 503.2.3) (Note the following on the plot 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. **DIMENSIONS (§ 503.2.1) (Note the following on the plot plan.):** Fire apparatus access roads shall have an unobstructed improved width of not less than twenty-four (24) feet, except for single-family residential driveways serving no more than two single-family dwellings, which shall have a minimum of sixteen (16) feet of unobstructed improved width.

11. **STREET NUMBERS (§ 505.1) (Note the following on the plot plan.):** Approved numbers and/or addresses shall be placed on all new and existing buildings and at appropriate additional locations, so as to be plainly visible and legible from the street or roadway fronting the property when approaching from either direction. The numbers shall contrast with their background and shall meet the following minimum size standards: 4" high with a ⅜“ stroke for residential buildings, 6” high with a ½“ stroke for commercial and multi-residential buildings and 12” high with a 1” stroke for industrial buildings.

12. **STRUCTURE SET BACK FROM SLOPE (§ 4704.1.3):** Single story structure shall be setback a minimum fifteen feet (15’) horizontally from top of slope to the farthest projection from a roof. A single story structure shall be less than twelve feet (12’) above grade. A two-story structure shall be setback a minimum of thirty feet (30’) measured horizontally from top of slope to the farthest projection from a roof. Structures greater than two (2) stories may require greater setback when the slope is greater than 2-to1.

13. **FIRE APPARATUS ACCESS ROADS (§ 503.1) 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.

14. **FUEL MODIFICATION (WUI § 603.2)** Maintain an effective fuel modification zone by removing, clearing away or modifying combustible vegetation and other flammable materials from areas within 100 feet from such buildings or structures. Fuel modification zones shall not extend beyond the property line. The fuel modification zone is divided into two zones: 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 ON THE PLOT PLAN

    A) The first zone includes the area from the building to a point 50 feet away. This zone must be modified and planted with fire resistive plants. 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.
    B) The second zone is the area between 50 to 100 feet from the building. In this zone the native vegetation may remain but it must be thinned by 50% and all dead and dying vegetation must be removed. Irrigation is optional.

15. **NOTE ON PLOT PLAN (WUI 604.5.2) 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. **Landscape Notice** must be signed when plans are picked up.

16. **LANDSCAPING AND FUEL MODIFICATIONS (WUI § 604.5.5) shall be installed before Frame Inspection**, to insure a fire safe environment.

17. **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 Fire Chief.

18. **BRIDGES (§ 503.2.6) (Note the following on the plot plan.):** When 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). Vehicle load limits shall be posted at both entrances to bridges when required by the Fire Chief.

19. **MARKING, FIRE APPARATUS ROADS (§ 503.3):** When required by the Fire Chief, 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 shall be 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.

20. **RESPONSE MAP UPDATES (§ 505.5)**: Any new development, which necessitates updating emergency response maps due to new structures, hydrants, roadways or similar features, shall be required to provide map updates in a format compatible with current department mapping services and shall be charged a reasonable fee for updating all response maps.

21. **LOCATION OF LPG TANK, ABOVE GROUND STORAGE (CA Fire Code, Table 3804.3) (Note the following 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 THE FOLLOWING ON THE PLOT PLAN): "Structures shall have an automatic fire sprinkler system installed per NFPA 13-D standards and Rancho Santa Fe Fire Protection District Standards. **Fire Sprinkler plans shall be submitted and approved by the Rancho Santa Fe Fire Protection District prior to framing inspection."**

Section 903.2 All occupancies built or moved into the District

Commercial	Residential (R1)(R3)	Additions	Remodels
All	All	50% increase or exceeding fire flow as defined in Appendix "B" or ISO grading Schedule	See Section Exception #5

EXCEPTION:

(1) Group U occupancies not greater than 500 square feet, when building lies more than 20 feet from an adjacent structure or property use.

(2) **Accessory buildings/barns** not greater than 1000 square feet, and not otherwise considered enclosed buildings/structures, which are of non-combustible 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 fire sprinkler. Requirements unless physically connected to other structures.

(4) **Remodels**: If the scope of work does not include additional square footage or significant modification to the interior or roof of the existing portions of the structure, or both, or when the cost of the installation of an automatic fire sprinkler system in the existing portion of the structure is greater than 15% of the construction costs of the remodel, a fire sprinkler system retrofit will not be required. The Chief may require that other protective measures be taken based on existing conditions and/or potential hazards.

2. **ROOFING COVERING (CA. Fire Code Ch 7A § 704A.1.2) (Note the following on the plan.)**: Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fire stopped with approved materials or have one layer of 72 pound mineral-surfaced non-perforated cap sheet complying with ASTM D3909, installed over the combustible decking.

3. **ATTIC VENTILATION (CA. Fire Code CH. 7A § 704A.2.1):** When required by Chapter 7A, roof and attic vents shall resist the intrusion of flame and embers into the attic area of the structure, or shall be protected by corrosion-resistant, noncombustible wire mesh with openings a minimum of ⅛ inch and shall not exceed ¼ inch or its equivalent.

4. **EAVE OR CORNICE VENTS (CA. Fire Code CH. 7A § 704.2.2):** Vents shall not be installed in eaves or cornices. **Exception:** Eave and cornice vents may be used provided they resist the intrusion of flame and burning embers into the attic area of the structure.

5. **SPARK ARRESTERS (§ 603.6.6) (Note the following on the plan.):** All structures having a chimney, flue or stovepipe attached to a fireplace, stove or 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 not greater than ½ inch, or other alternative material the FAHJ determines provides equal or better protection.

6. **GLAZING MATERIALS (CA Fire Code Ch. 7A, § 704A.3.2.2):** Exterior Windows, window walls, glazed doors and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane or glass block units, or have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or in accordance with § 715, or conform to the performance requirement of SFM 12-7A-2.

7. **VINYL WINDOWS (WUI § 504.8)** 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

8. **SKYLIGHTS (WUI § 504.8.):** Skylights **SHALL BE** tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than twenty (20) minutes.

9. **EXTERIOR WALL SURFACING MATERIALS (WUI § 505.5):** Exterior walls of buildings or structures shall be constructed with materials approved for a minimum of one-hour (1'), fire-resistance-rated construction on the exterior side or constructed with approved noncombustible materials. **Exception:** Heavy timber or log wall construction.

10. **EXTERIOR DOORS (WUI § 505.9):** Exterior Doors shall be approved noncombustible construction, solid core wood not less than1 3/4 inches thick (45mm), or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with § 505.8.

11. **COMBUSTIBLE FENCES AND OTHER COMBUSTIBLE ATTACHMENTS TO STRUCUTURES (WUI § 505.7.1):** shall have the first 5 feet of fences and other items attached to a structure shall be constructed of non-combustible material or meet the same ignition-resistant standards as the exterior walls of the structure.

12. **SMOKE DETECTORS (§ 907.2.10.2) (Note the following on the plan.):** 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 the 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, in buildings without commercial power or in buildings that undergo alterations, repairs or additions, as regulated by § 907.2.10.6.

13. **ADDITIONS, ALTERATIONS OR REPAIRS TO GROUP R OCCUPANCIES (§ 907.2.10.6) (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 detectors shall be installed in accordance with § 907.2.10.

14. **CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE (§ 4710):** The construction methods for exterior wildfire exposure in a wildland-urban interface fire area shall be as provided in Chapter 7A of the County Building Code.

ADDITIONAL REQUIREMENTS, sheet(s) attached:

- ❑ **Submit corrected plans with new sheets for recheck with plan checker Thursday 8:30-11:00 Only**
- ❑ **Call Plan checker, listed below, to arrange for a recheck appointment.**
- ❑ **Corrected sheets and plans are to be logged-in for recheck.**

Plan Checker: _____ **Phone Number:** _____ **Date:** _____