



SAN DIEGO COUNTY FIRE AUTHORITY
FIRE CODE PLAN CHECK
CORRECTION LIST FOR GRADING PLANS
(PDS Building Division and DPW/Land Development)

CUSTOMER INFORMATION VERSION

The items listed below are commonly omitted from plans submitted for review. Advance preparation by applicants to satisfy these requirements will help expedite the plan review process. Be advised: just as specific items on this list may not apply to specific projects, this list also does not necessarily include all requirements for all projects; other items may apply. Please use this list as a guide only.

A. GENERAL REQUIREMENTS

1. **Each of the items on this list that have been circled require correction before a permit will be issued.** The approval of plans and specifications does not permit the violation of any section of the fire code, county ordinances, or state law. The following list does not necessarily include all errors and omissions. Codes are paraphrased. Citation is the primary reference. For full text see the County and California Fire Codes.
2. The following supplements are attached and considered part of this review:
 - Emergency Vehicle Turnaround (CFA #363)
 - Other _____
3. Plan revisions must be made by printing new sheets incorporating the necessary modifications. **Revisions made with pen or pencil, by crossing out or taping on information, or by using white-out are not allowed.**
4. **Plans will not be accepted for resubmittal** unless you submit the **original correction list**.
5. Additional plan check fees will be required if comments are not resolved after the second plan check, if changes are made to the project, or if the previously plan-checked, stamped, and/or red-marked set is not returned.
6. Additional plan check fees required due to: insufficient progress, changes, lost red-marked set, other

B. SITE REQUIREMENTS

1. **WILDLAND-URBAN INTERFACE SETBACK.** In areas designated as a 'Fire Hazard Severity Zone' in the wildland-urban interface, structures shall be setback a minimum of 30 feet from property lines and biological open space easements unless the fire code official determines that terrain, parcel size or other constraints on the parcel make the required setback infeasible. When parcels are adjacent a national forest, state park or open space preserve, buildings and structures must be located a minimum of 100 feet from the property line adjacent the protected area. (County Fire Code § 4907.1.1)
2. **WATER STORAGE TANK.** Water storage tank(s) and fire department connection(s) (FDC's) are required for fire protection and suppression purposes. The tank(s) and FDC(s) shall be installed per County of San Diego requirements; and be filled and fully operational prior to the storage of combustible materials on site. (County Fire Code § 507.2.2)
 - Revise the Grading Plan to show the tank location (coordinate with that as shown on the Architectural Plot Plan)

C. SITE ACCESS

1. **FIRE APPARATUS ACCESS.** Fire apparatus access roads, including private residential driveways, shall be required for every building 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. (County Fire Code § 503.1)
 - Revise the Grading Plan to show the road/access easement as it appears on the legal division of land
 - Revise the Grading Plan to show driveway access to all proposed structures (coordinate with that as shown on the Architectural Plot Plan)
2. **DEAD ENDS.** All dead end fire access roads, including private residential driveways, in excess of 150 feet in length shall be provided with an approved means for turning around emergency apparatus. In addition, for private residential driveways that are determined to be over length by the fire code official, turnouts are required (County Fire Code § 503.2.5 & 2.8)
 - Revise the Grading Plan to show the location of an emergency vehicle turnaround (coordinate with that as shown on the Architectural Plot Plan). **NOTE: off-street parking as required by the County Zoning Ordinance shall not encroach into the turnaround area – see #8 below**

- Revise the Grading Plan to show the location of (a) driveway turnout(s). Turnouts shall be a minimum of 12 feet wide and 30 feet long with a minimum 25 foot taper on each end. See Architectural Plot Plan for required turnout locations indicated in red
3. **DIMENSIONS.** Fire apparatus access roads shall have an unobstructed improved width of not less than 24 feet. Exception: 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 not less than 13 feet 6 inches. Standard cross slope shall be 2%, minimum cross slope shall be 1%, maximum cross slope shall be 5% (County Fire Code § 503.2.1)
 - Revise the Grading Plan to show dimensions for the improved width of the road/access easement
 - Revise the Grading Plan to show dimensions for the improved width of the driveway as stated above
 - Note the requirement for unobstructed vertical clearance as stated above
 - Revise the Grading Plan to show the cross slope at the driveway and emergency vehicle turnaround (if applies)
 4. **TURNING RADIUS.** The inside turning radius of a fire apparatus access road shall be a minimum of 28 feet, or as approved by the fire code official. (County Fire Code § 503.2.4)
 - Revise the Grading Plan to indicate the inside turning radius as it relates to driveway turns
 - Revise the Grading Plan to indicate the inside turning radius as it relates to emergency vehicle turnaround
 5. **BRIDGES.** 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 standard AASHTO HB-17. (County Fire Code § 503.2.6)
 - Submit plans and calculations for the bridge design to the County Building Division for review and approval
 6. **GRADE.** The grade of a fire apparatus access roadway shall not exceed 20.0%, and the angle of departure and angle of approach shall not exceed 7 degrees (12%) (County Fire Code § 503.2.7)
 - Revise the Grading Plan to show the road/access easement grade at the property frontage
 - Revise the Grading Plan to show the driveway grade at representative locations along the complete path of travel
 - Revise the Grading Plan to show the angle of departure and angle of approach
 7. **SURFACE.** Revise the Grading Plan to show the fire access road surface material. Fire apparatus access roadways shall be designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 lbs., unless authorized by the fire code official) and shall be provided with an approved paving surface so as to provide all-weather driving capabilities. Paving and sub-base shall be installed to the standards specified in the County of San Diego Parking Design Manual. (County Fire Code § 503.2.3)
 - 0 – 14% Slope – Minimum Surface: 2" Asphaltic Concrete
 - 15 – 20% Slope – Minimum Surface: 3" Asphaltic Concrete OR 3-1/2" Portland Concrete with deep broom finish perpendicular to the path of travel
 - An exception allows for 6" of compacted Decomposed Granite on grades up to 10%. This exception is based upon parcel specific criteria, and is at the discretion of the fire code official (**allowed only if this box is checked**)
 - All pervious and semi-pervious paving materials must be designed to support the imposed loads of fire apparatus (not less than 75,000 lbs). **Provide specification for product to be installed, as well as proof of compliance with this requirement and installation detail(s). NOTE: County Building Division approval is required for these materials.**
 8. **OBSTRUCTIONS.** Parking or other obstruction of the full required width of a fire apparatus access roadway is prohibited. (County Fire Code § 503.4 and California Vehicle Code § 22500.1)

D. ADDITIONAL REQUIREMENTS (See Attached)
