

LAGUNA BEACH FIRE DEPARTMENT

STAGUNA COLLEGE OF THE STATE OF

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Fire Department Site Access Plan (FDSAP) Submittal Checklist

The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire apparatus access roadways, fire hydrants, adequate water supply, fire protection systems, fuel modification / landscape requirements, and firefighter access to and around structures. This checklist is intended to serve as a general guideline when submitting plans for fire department review. The project design must comply with all current adopted California Fire Code, Laguna Beach Municipal Fire Code amendments, and referenced NFPA standards. The following requirements must be addressed on a separate <u>"Fire Department Site Access Plan" ("FDSAP")</u> sheet, and / or other sheets in the plan set as applicable.

Scope of project, including building area, construction type and occupancy type must be clearly defined on sheet FDSAP.

<u>Project specific Fire Department Notes are required on sheet FDSAP, and must include fire protection systems as a separate deferred submittal.</u>

All mitigation comments/corrections (e.g., an approved AM&M proposal) are to be scanned onto full size sheets. Additional AM&M sheets should be located immediately after sheet FDSAP, and are typically titled FD AM&M 1, 2, etc.

Fuel Modification and Landscape Requirements:

 Verification that all of the requirements related to the City's Landscape / Fuel Modification Guidelines and Maintenance Program are clearly identified and addressed on submitted plans.

Fire apparatus access road design and markings must be reflected on sheet FDSAP:

- Fire apparatus access road shall have an unobstructed width of 20 feet and an unobstructed vertical clearance of 13 feet 6 inches, and must be clearly reflected.
- Dead end fire apparatus access roads in excess of 150' shall be provided with an approved turn around.
- Fire apparatus access roads shall be designed to support the imposed loads of fire apparatus (74,000 lbs.) and shall be surfaced to provide all weather driving capabilities.
- Fire lane identification must include all red curb and signage as applicable.

<u>Firefighter access paths must be identified on sheet FDSAP. and on grading. landscape and elevation sheets:</u>

Reflect access to and around the building, and to all emergency escape and rescue openings

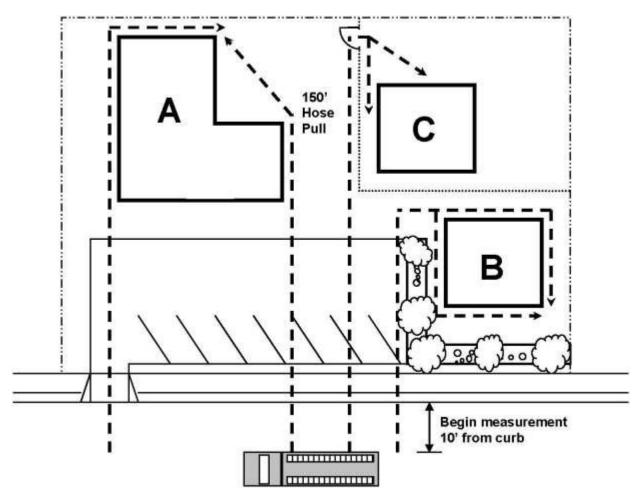
- required by the CBC. <u>Provide a minimum 3 feet wide, all weather, non-combustible access path around the structure, with a maximum slope not to exceed 10%.</u>
- Slopes over 10% require CBC Chapter 10 compliant, non-combustible stairs.

Water availability, fire flow, hydrant spacing and location must be identified on FDSAP:

- Fire flow requirements shall comply with current adopted CFC Appendix B. Hydrant Flow Report must be completed and included on sheet FDSAP.
- Fire hydrant systems & spacing shall comply with current adopted CFC Appendix C, with a maximum distance from frontage to hydrant not to exceed 250 feet.

Hose Pull and Hose Lay must be clearly depicted and dimensioned on sheet FDSAP:





In the example above, the parking lot is not accessible to fire apparatus due to turning radii and fire lane widths less than the required minimums.

EXAMPLE #2: Hose Pull, Hose Lay, and Hydrant Spacing

A: Hose Pull (Distance from Fire Engine to Building): Represents the amount of fire hose that firefighters must pull from the engine to reach to and around the structure. Hose pull may not exceed 150' to any exterior first floor portion of the structure. Hose pull must be

reflected and calculated on the firefighter access paths, and cannot go through or over walls, hedges, cars, buildings, etc.

B: Hose Lay (Distance from Fire Engine to a Hydrant): Represents the amount of supply hose that must be laid out of the back of the fire engine to bring water from the closest fire hydrant to the fire engine. Hose lay is measured along the vehicle path of travel in the fire lane, not "as the crow flies." Hose lay cannot exceed 250 feet from the nearest hydrant to the staged fire engine.

<u>C: Hydrant Spacing (Distance between Hydrants):</u> The distance between hydrants serving the building shall not exceed the "Maximum Distance" listed in CFC Table C102.1, as measured along the fire lane. Hydrants located on portions of the fire lane that do not serve the building do not need to be evaluated for spacing relative to each other, only with respect to hydrants that do serve the structure. For example, when evaluating hydrant placement for the building shown in the diagram below, C1 may exceed the hydrant spacing requirements, while C2 and C3 cannot. The "Average Spacing" from Table C102.1 shall be maintained to prevent multiple hydrants from being concentrated in only one portion of the fire lane.

