



EL DORADO HILLS FIRE DEPARTMENT

"Serving the Communities of El Dorado Hills, Rescue and Latrobe"

January 31, 2019

Emma Carrico, Project Planner
El Dorado County Planning Department
2850 Fair Lane
Placerville, CA 95667

Re: EDH-Folsom Self Storage – S18-0012, PD18-0002 – FIRE COMMENTS – Initial Consultation & Fire Flow

Dear Mrs. Carrico:

The El Dorado Hills Fire Department has reviewed the above referenced project and submits the following comments regarding the ability to provide this site with fire and emergency medical services consistent with the El Dorado County General Plan, State Fire Safe Regulations, as adopted by El Dorado County and the California Fire Code as amended locally. **The fire department reserves the right to update the following comments to comply with all current Codes, Standards, Local Ordinances, and Laws in respect to the official documented time of project application and/or building application to the County.** Any omissions and/or errors in respect to this letter, as it relates to the aforementioned codes, regulations and plans, shall not be valid, and does not constitute a waiver to the responsible party of the project from complying as required with all Codes, Standards, Local Ordinances, and Laws.

1. **Fire Flow:** The project shall be required to request a Fire Flow Letter from the El Dorado Hills Fire Department to determine the minimum required GPM for the project site. The fire flow shall be determined in compliance with the CA Fire Code, Appendix B, based on the type of construction and square footage of each building. This Fire Flow Letter shall then be given to EID in order to produce a Facilities Improvement Letter (FIL) which will state if the required amount of water can be supplied to the project. Conformance with this condition shall be verified during review of the improvement plans.
2. **Fire Sprinklers:** All fire-flow numbers listed above require all structures to install fire sprinklers in accordance with the CA Fire Code, CA Building Code, NFPA and Fire Department requirements. Conformance with this condition shall be verified during review of the improvement plans.
3. **Underground Private Fire Mains:** All private fire service mains shall be installed per NFPA 24 & EID requirements. They shall be inspected, tested and maintained per NFPA 25. Conformance with this condition shall be verified during review of the improvement plans.
4. **Fire Hydrants:** This development shall install Dry Barrel Fire Hydrants which conform to El Dorado Irrigation District specifications for providing water for fire protection. The spacing between hydrants in this development shall not exceed three-hundred (300) feet. The exact location of each hydrant on private roads and on main county-maintained roadways shall be determined by the Fire Department. Conformance with this condition shall be verified during review of the improvement plans.

5. **Fire Hydrant Visibility:** To enhance nighttime visibility, each hydrant shall be painted with safety white enamel and mark the roadway with a blue reflective marker as specified by the Fire Department and State Fire Safe Regulations. Conformance with this condition shall be verified during review of the improvement plans.
6. **Fire Department Access:** Approved fire apparatus access roads and driveways shall be provided for every facility, building, or portion of a building. The fire apparatus access roads and driveways shall comply with the requirements of Section 503 of the CA Fire Code and the current El Dorado Hills County Water District Ordinance, as well as State Fire Safe Regulations as stated below (but not limited to):
 - a. All roadways shall follow the Parking and Fire Lane Standards as approved by the Fire Department.
 - b. Each dead-end road shall have a turnaround constructed at its terminus.
 - c. Where maximum dead-end road lengths are exceeded, there shall be a minimum of two (2) access roadways allowing for the safe access of emergency apparatus and civilian evacuation concurrently.
 - d. Phasing may be allowed if all Fire Access requirements are met and approved by the Fire Code Official for each phase.
 - e. The fire apparatus access roads and driveways shall extend to within one-hundred fifty (150) feet of all portions of each facility and all portions of the exterior of the first story of the building as measured by an approved route around the exterior of the building or facility.
 - f. Driveways and roadways shall have unobstructed vertical clearance of fifteen (15) feet and a horizontal clearance providing a minimum two (2) feet on each side of the required driveway or roadway width.
 - g. Depending on final heights of each building, the final layout of fire apparatus access roads shall be determined and approved by the fire code official with consideration of whether a ladder truck or ground ladders would be used for firefighting operations.

Conformance with this condition shall be verified during review of the improvement plans.

7. **Fire Access During Construction:** In order to provide this development with adequate fire and emergency medical response during construction, all access roadways and fire hydrant systems shall be installed and in service prior to combustibles being brought onto the site as specified by the Fire Department, Standard #B-003. A secondary means of egress shall be provided prior to any construction or the project can be phased. Conformance with this condition shall be verified during review of the improvement plans.
8. **Parking and Fire Lanes:** All parking restrictions as stated in the current California Fire Code and the current El Dorado Hills County Water District Ordinance shall be in effect. Conformance with this condition shall be verified during review of the improvement plans.
9. **Roadway Surface:** Roadways shall be designed to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide all-weather driving conditions. All-weather surfaces shall be asphalt, concrete or other approved driving surface. Conformance with this condition shall be verified during review of the improvement plans.

10. **Roadway Grades:** The grade for all private roads, streets, lanes and driveways shall not exceed twenty percent (20%). Pavement/Concrete shall be required on all grades twelve percent (12%) or greater. For grades of sixteen percent (16%) – twenty percent (20%), a Type II Slurry Seal shall be applied to asphalt surfacing, and concrete roadways and driveways shall be textured to provide a coarse broom finish to improve vehicular traction. Conformance with this condition shall be verified during review of the improvement plans.
11. **Traffic Calming:** This development shall be prohibited from installing any type of traffic calming device that utilizes a raised bump/dip section of roadway. All other proposed traffic calming devices shall require approval by the fire code official. Conformance with this condition shall be verified during review of the improvement plans.
12. **Turning Radius:** The required turning radius of a fire apparatus access road/driveway shall be determined by the fire code official. Current requirements are forty (40) foot inside radius and a fifty-six (56) foot outside radius on through streets, and a minimum fifty (50) foot radius from center point to face of curb for Cul-De-Sacs and Hammerhead turnarounds. If requested, the fire code official may reduce the minimum turning radius to a thirty (30) foot inside radius and a fifty (50) foot outside radius on a case-by-case basis. Conformance with this condition shall be verified during review of the improvement plans.
13. **Turnouts & Turnarounds:** Turnouts are required on driveways that exceed one-hundred fifty (150) feet in length and shall be placed near the midpoint of the driveway. If the driveway extends beyond eight-hundred (800) feet in length, then turnouts shall be required every four-hundred (400) feet. Turnouts shall be designed to be ten (10) feet wide and thirty (30) feet in length with a minimum twenty-five (25) taper on each end. Dead-end fire apparatus access roads in excess of one-hundred fifty (150) feet in length shall be provided with an approved area for turning around fire apparatus. Turnarounds shall be located within fifty (50) feet of the structure(s) to be protected and shall have a minimum 50-foot radius. Conformance with this condition shall be verified during review of the improvement plans.
14. **Gates:** All gates shall meet the El Dorado Hills Fire Department Gate Standard #B-002. Gate plans shall be submitted and reviewed for compliance by the Fire Code Official. Conformance with this condition shall be verified during review of the improvement plans.
15. **Fire Service Components:** Any Fire Department Connection (FDC) to the sprinkler system and all Fire Hydrant(s) outlets shall be positioned so as not to be obstructed by a parked vehicle. All FDC's and PIV's shall have signage affixed to them indicating the building they serve. There shall be one (1) fire service component set per building. Conformance with this condition shall be verified during review of the improvement plans.
16. **Knox Box and Keys:** All Commercial or Public occupied buildings shall install a Knox Box and building keys including, but not limited to, main entry doors, utility closets, roof accesses, alarm panels, fire sprinkler locks and all other keys required by the fire code official for emergency access. It is recommended, but not required, that residential buildings also add a Knox box and main front door key for improved emergency access. Conformance with this condition shall be verified during review of the improvement plans.
17. **Knox Key Shunt:** A Knox Key Shunt system shall be installed to terminate power to all back-up power generators. Conformance with this condition shall be verified during review of the improvement plans.
18. **Fencing:** Lots that back up to wildland open space shall be required to use non-combustible type fencing. Conformance with this condition shall be verified during review of the improvement plans.
19. **Vegetative Fire Clearances:** Prior to June 1st each year, vegetative clearance shall be provided around all EVA's (Emergency Vehicle Access), combustible habitable structures up to the property line as stated in

Public Resources Code Section 4291, Title 19 as referenced in the CA Fire Code. Conformance with this condition shall be verified during review of the improvement plans.

20. **Funding Mechanism for Vegetative Clearances and Emergency Fire Access Components:** This development shall provide a funding mechanism to ensure the maintenance of all emergency access roadways, gates, vegetative clearances as required by the Wildland Fire Safe Plan (WFSP), and other required fire access components. Compliance with this condition shall be verified during review of Final Map for the subdivision.

Contact Marshall Cox at the El Dorado Hills Fire Department with any questions at 916-933-6623 x1017.

Sincerely,

Marshall Cox
Fire Marshal
EL DORADO HILLS FIRE DEPARTMENT