


RODEO-HERCULES FIRE DISTRICT
M E M O R A N D U M

DATE: May 6, 2018

TO: Victor Carniglia, Planning Consultant

FROM: Mark Pedroia, Fire Protection Specialist 

SUBJECT: Hercules Self Storage – 1444 Willow Avenue

The Rodeo-Hercules Fire District (RHFD) has reviewed the 9-page Valli Architecture Group plan set dated 4/1/2018. These conditions/comments are the result of the initial review of the Self-Storage plans and a site plan for the adjacent Auto, Express & Car Wash. In accordance with the provisions of the CA Fire Code (CFC), Building Code (CBC), Local Ordinances and adopted standards; we provide the following comments/conditions for the development:

- I. Fire Department access roads shall be provided to within 150 feet path-of-travel distance of all portions of first floor exterior walls of all structures and hazardous materials use or storage areas. Access roads shall be designed to current Fire Department standards: 20 feet wide minimum for structures two-stories or less in height, and 26 feet wide minimum (with Aerial Apparatus Access compliance) for structures more than 30 feet in height. Access shall support the imposed load of fire apparatus weighing at least 74,000 lbs. Turning radius 25 feet inside and 45 feet outside. Dead-end fire department access routes more than 150 feet in length shall have an apparatus turn-around per current Fire Department standards. CFC 503.

Apparatus Access issues:

- a. Projects in excess of 62,000 ft² require two separate fire department access roads and which are 'remote' from each other. Remote = separated a distance apart of not less than one-half the maximum overall diagonal dimension of the property. This project exceeds the basic (62k ft²) requirement and also the permitted exception (124k ft²) and is not approvable with a single access. CFC D107.2
- b. Buildings over 30' in height are required to satisfy the Aerial Apparatus Access Road requirements (26' wide on the longest side with proximity setback 15'-30'). Building D triggers this requirement. CFC D105.1
- c. Site Plan. While turning radius evaluation is required around buildings, specific evaluation of the switchback turn maneuver between the divided entrance drive aisle and the Self-Storage drive aisle is necessary and also at the NE corner of Building D. CFC 503.2.4.
- d. A recorded access agreement establishing a right-of-way is necessary for the Self-Storage parcel as there is no connection from this parcel to Willow Avenue.
- e. Building D. Please identify (stripe on asphalt) the prescribed "loading area" where customers will park their moving trucks while loading/unloading. Our interest is identifying where they will position and more importantly, that they are not parking in the minimum 20' fire lane which accessing the building.

2. A Fire Flow Analysis including proposed building areas, type of construction, and calculated available fire flow at the proposed fire hydrants shall be provided to the Fire Department for review and approval concurrent with submittal of Grading plans. Minimum adjusted (50% sprinkler credit) Fire Flow for this commercial project is estimated at 3,375 gallons per minute with 20 residual psi in the water main. Applicant shall contact East Bay Municipal Utilities District to have a flow test performed for the nearest existing hydrant to be used for the hydraulic design prior to submitting the Fire Flow Analysis. CFC 507.
3. Hydrant spacing for this commercial project shall comply with current Fire District standards of CA Fire Code Chapter 9 and Appendix C and three (3) copies of the final site plan shall be submitted for approval of hydrant locations.
4. Location of Fire Department Connections (FDCs) for the required automatic fire sprinkler systems are a deferred item but shall be on the access side of the buildings and within 50' of a fire hydrant. CFC Appendix C.
5. Private Underground Fire Mains (aka on-site mains behind the detector check) require a separate Fire Department permit. CFC 507.
6. The Rodeo-Hercules Fire Protection District has adopted a local ordinance which requires automatic fire sprinkler systems in certain type/size of new construction. All structures shall be protected with automatic fire sprinkler systems in accordance with CA Fire Code Chapter 9 as adopted by the Fire District. CFC 903.
7. The Fire District response to the Development Review Application is: The project is served by Fire Station 76 (Refugio Valley Road). Currently, units are dispatched from Fire Station 76 (1680 Refugio Valley Road, Hercules), Fire Station 75 (326 Third Street, Rodeo) and automatic aid from the Pinole Fire Department Fire Station 73 (880 Tennent, Pinole), the Contra Costa Fire Protection District Station 69 (4640 Appian Way) and the all-volunteer Crockett - Carquinez Fire Department (736 Loring Avenue, Crockett). Budgetary constraints have subjected Fire Station 74 (Pinole Valley Road, Pinole) to a closure 100% of the time (brown-out); significantly affecting response time and weight of fire attack. The arrival of the 1st alarm assignment that permits interior firefighting is delayed due to these conditions and the Fire District does not satisfy the Hercules General Plan Safety Element (VI.II.D.1) Fire Service Response Time Standard (5 min response 90% of the time). This property is underserved related to fire protection capability. The present Fire Service Development Impact Fee will not (by itself) overcome the cumulative impact of this project. This project and proposed adjacent developments will further erode emergency response times and fire protection delivery. The Fire District is evaluating long term mitigations to overcome this issue however the District may be requesting this developer to mitigate the impact of this development with built-in fire protection enhancements as an offset to the demand this development is creating.
8. As mitigation for delays in response time, traffic signal pre-emption (Opticom or compatible) shall be provided on traffic signals lacking same. Locations within the response route to be identified by the District.
9. Review of the Environmental Site Assessment, re-use of the site and implementation of the

construction program shall be approved by Certified Unified Program Agency (CUPA), Contra Costa Hazardous Materials Programs, 4585 Pacheco Blvd. Suite 100, Martinez, CA 94553, ccchazmat@hsd.cccounty.us (925-335-3200).

10. Site address signage per current Fire Department Standards shall be established and maintained during and after any combustible construction or intensification of site use. A complex directory shall be provided at the main entrances. CFC 505.
11. Elevators shall accommodate a medical stretcher. The fire resistive smoke assembly used for the elevator must be operable from the elevator cab (by first responders). CBC 607.
12. Required Fire Department access roads shall be signed "No Parking-Fire Lane" per current Fire Department standards and the CA Vehicle Code. CFC 503.
13. Traffic calming measures or controls (speed bumps, humps, undulations, gates, etc.) are not approved as a part of this review and require specific approval from the Fire Department. CFC 503.4.
14. Structures and lockable gates limiting vehicle access to commercial facilities shall be equipped with a Fire Department approved locking device or Fire Department approved key system ("Knox" lock or "Knox" keyed lock). Access controls on fire department response routes shall be electrically operated, equipped with pre-emption and Knox-key override (gates, barriers, retracting bollards, etc.). CFC 506.
15. A bi-directional public safety emergency responder radio system, designed and installed per current Fire Department standards, is required in all new structures. System can be building specific or a campus-wide system can be provided. CFC 510.
16. Rooftop Solar Photovoltaic Systems shall comply with the CA Fire Code and CA State Fire Marshal Guideline. CFC 605.
17. Required Fire Department permits that are eligible for deferred submittal: **Construction;** Underground Fire Main, Automatic Fire Sprinkler System, Sprinkler Alarm Supervisor Service (water-flow monitoring), Generator Fuel Storage (if proposed). **Operation;** Bi-Directional Repeater System. CFC 105.
18. The developer shall remit the Fire Development Impact Fee with the Building Permit submittal.
19. The developer shall remit the Rodeo-Hercules Fire District Review Fee 1,2 in the amount of \$486.00 for the planning review.
20. The developer shall submit a "Fire Safety During Construction" plan to the Fire District at the time of Building Permit submittal. CFC 3308.
21. Emergency Evacuation Guide and signage (entrances, stairwells, elevator lobbies) and Stairwell identification signage shall be provided and submitted to the RHFD for review to ensure all required information is provided in the plan and on the floor plans. CFC 403 & 1023.

22. Storage or use of any hazardous materials at the site (such as diesel fuel for the on-site generator or acid for batteries) will require a Hazardous Materials Business Plan be submitted to the CUPA. CFC 5001.
23. Access roads and water supplies for fire protection shall be installed and made serviceable prior to storage or construction of any combustible materials. CFC 3312.