

September 24, 2013

Via E-mail: rleong157@yahoo.com

Mr. Roland Leong, D.D.S.
Leong Family Dentistry
420 Peninsula Avenue
San Mateo, CA 94401

CITY OF SAN MATEO
COMMUNITY DEVELOPMENT

OCT - 1 2013

PLANNING DIVISION

RE: Building Survey Summary
Leong Family Dentistry
420 Peninsula Avenue
San Mateo, CA 94401

Dear Mr. Leong:

Hughes Associates, Inc. (HAI) has been retained by Leong Family Dentistry to conduct a building survey to observe the existing conditions of the dental office building, located at 420 Peninsula Avenue in San Mateo, California. The building was surveyed on September 21, 2013 for general compliance with the requirements of the 2010 editions of the California codes, as amended by the City of San Mateo (the Authority Having Jurisdiction, AHJ), and applicable NFPA codes and standards. This letter summarizes our survey observations.

Applicable Codes

2010 edition of the California Building Code (CBC)

2010 edition of the California Fire Code (CFC)

2010 edition of NFPA 13 - Standard for the Installation of Sprinkler Systems

2010 edition of NFPA 72 - National Fire Alarm and Signaling Code

Building Description

The building was originally constructed in the 1920s. It is a one-story, type V non-rated building with a total area of 3,396 square feet. The building has been owned by Mr. Leong since 2003. In 2005, a portion of the building (1,471 square feet) was renovated to be used as Leong Dentistry's office. At the time of this survey, the remaining 1,925 square feet of space remained vacant (see Figure 1). According to the building owner, the vacant space will be renovated to office space.

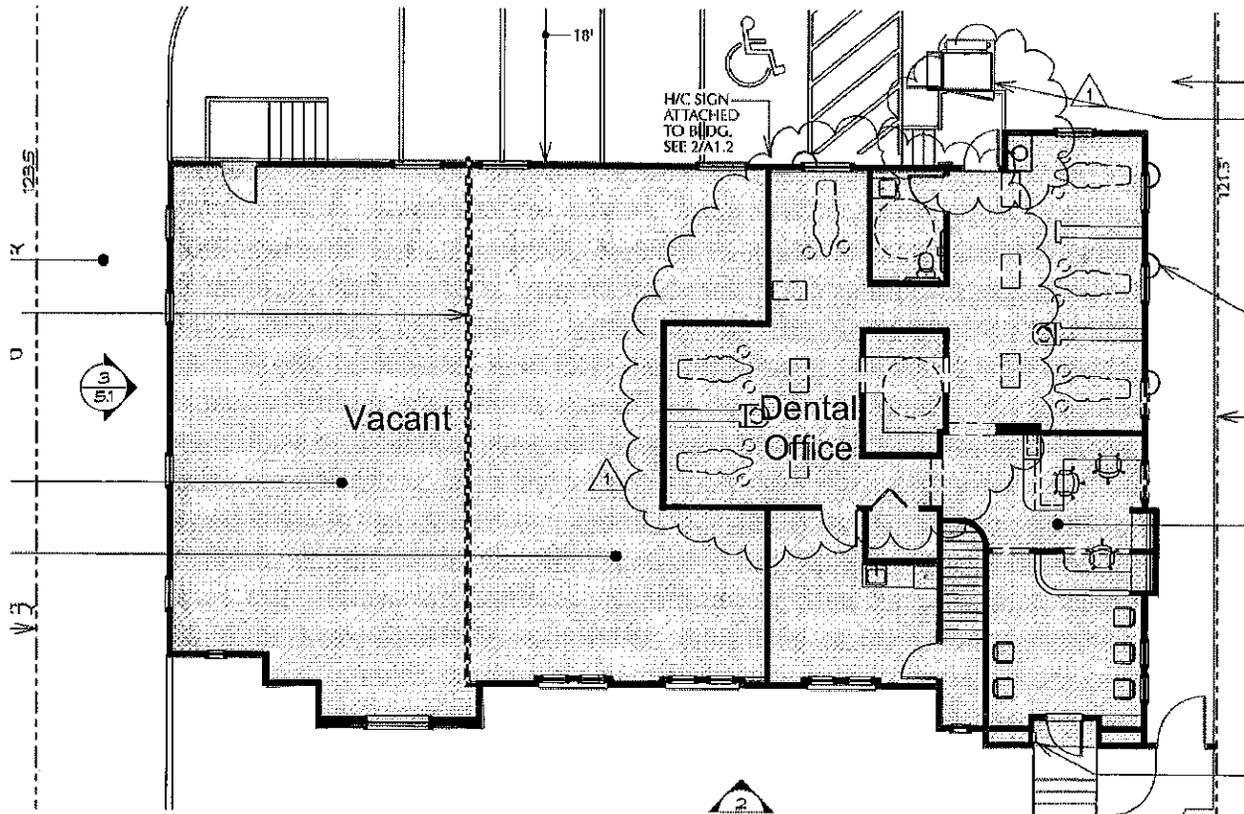


Figure 1 Building Floor Plan

Survey Observations

1. The current dental office is provided with two exits. The exit leading to the private parking lot is provided with a wheelchair lift (see Figure 2). As the dental office is classified as a Business occupancy and has an area of 1, 471 square feet, a total of 15 occupants is assumed per the CBC Table 1004.1.1. Therefore, one exit is required. According to CBC Section 1007.1, at least one accessible means of egress is required to be provided. The number of exits and the number of accessible exits meet the code requirements.

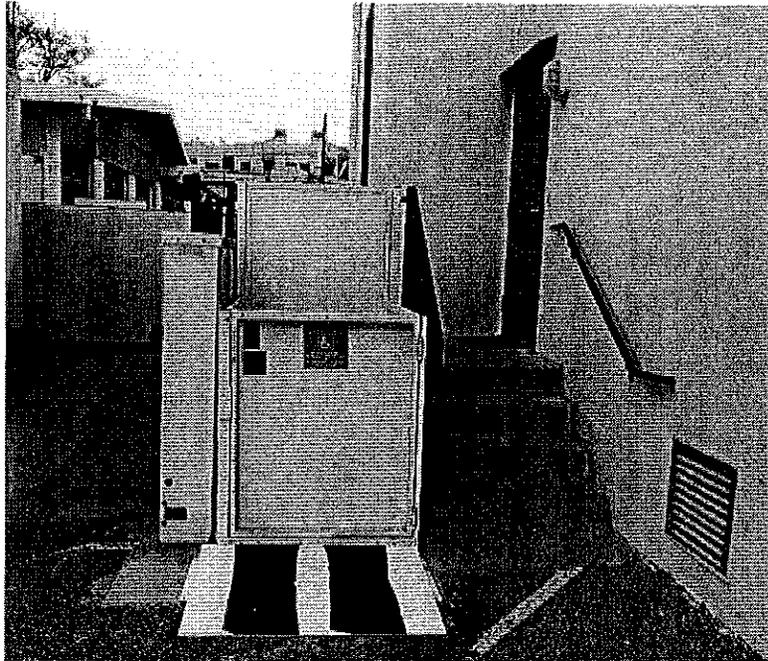


Figure 2 Wheel Chair Lift at South Exit

2. The vacant space is currently one open space. It is provided with one exit leading to the private parking lot. During the proposed renovation, the vacant space will be divided into two office spaces. Additional exits/entrances will be provided. The proposed floor plan of the vacant space was not available for review at the time of this survey.
3. All exits serving both the dental office and the vacant space discharge directly to the exterior, which meet the code requirements specified in CBC Section 1027.
4. All three exit doors serving both the dental office and the vacant space have a minimum clear width of 32 inches, which meet the requirements in CBC Section 1008.1.1. As the dental office is assumed to have less than 50 occupants, restriction on the direction of door swing is not required. This is consistent with the code requirements specified in CBC Section 1008.1.2.
5. Illuminated exit signs are provided throughout the dental office (see Figure 3).
6. Emergency lighting is provided throughout the dental office. It meets the code requirements. It appears that the emergency lights are provided with battery backup power.
7. The dental office has a small basement used for equipment and storage. The basement is served with one flight of stairs. The tread depth is approximately 9 inches and the riser height is approximately 7 inches. The tread depth does not meet the requirement in CBC 1009.4.2, which requires the tread depth to be a minimum 11 inches. The riser height meets the requirement in CBC 1009.4.2. The basement is not a normally occupied space and used exclusively by the employees. We suggest that no action is required to upgrade the existing noncompliant basement stairs during the proposed renovation.

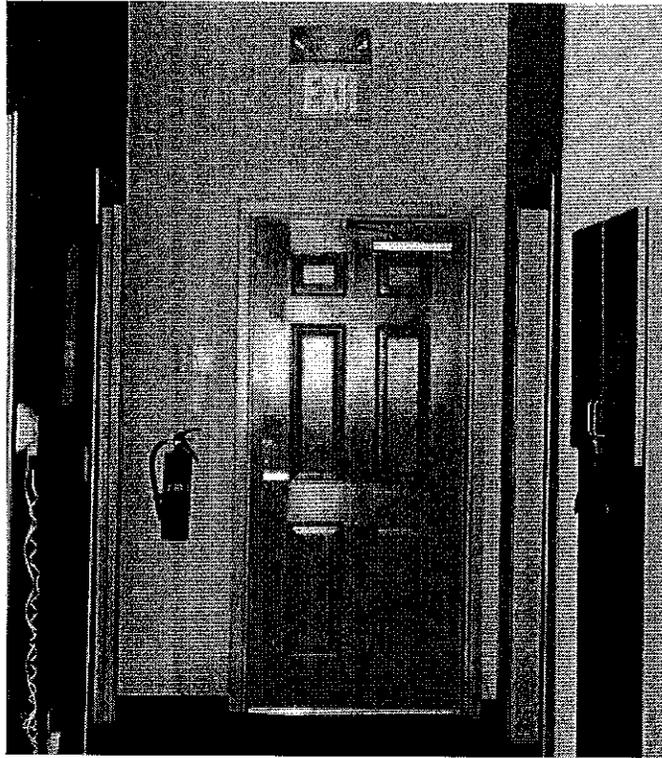


Figure 3 Exit Sign at South Exit

8. The exit route from the basement to the main exit goes through a small intervening room. The room is used as a break room. Both the basement door and the break room door are not provided with locks. The break room and the basement are used exclusively by the employees. The current arrangement is considered acceptable.
9. The dental office is provided with an automatic sprinkler system. The vacant space is not provided with any sprinklers or piping. A connection point is provided in the vacant space. It is required that the vacant space is provided with sprinkler protection. The new sprinklers and piping can be connected to the existing system serving the dental office.
10. The sprinkler system riser is a 3-inch riser located outside near the northwest corner of the building (see Figure 4). The sprinkler riser appears to be galvanized. It appears that the waterflow switch is electrically monitored. The two butterfly valves are not electrically monitored. They are locked in the open position. According to CBC 903.4 and NFPA 13 Section 8.16.1.1.2.1, this is considered acceptable when the system serves less than 20 sprinklers. As the vacant space of this building will be provided with sprinkler protection during renovation, the sprinkler system will serve more than 20 sprinklers. It is required that all valves controlling the water supply to be electrically supervised.

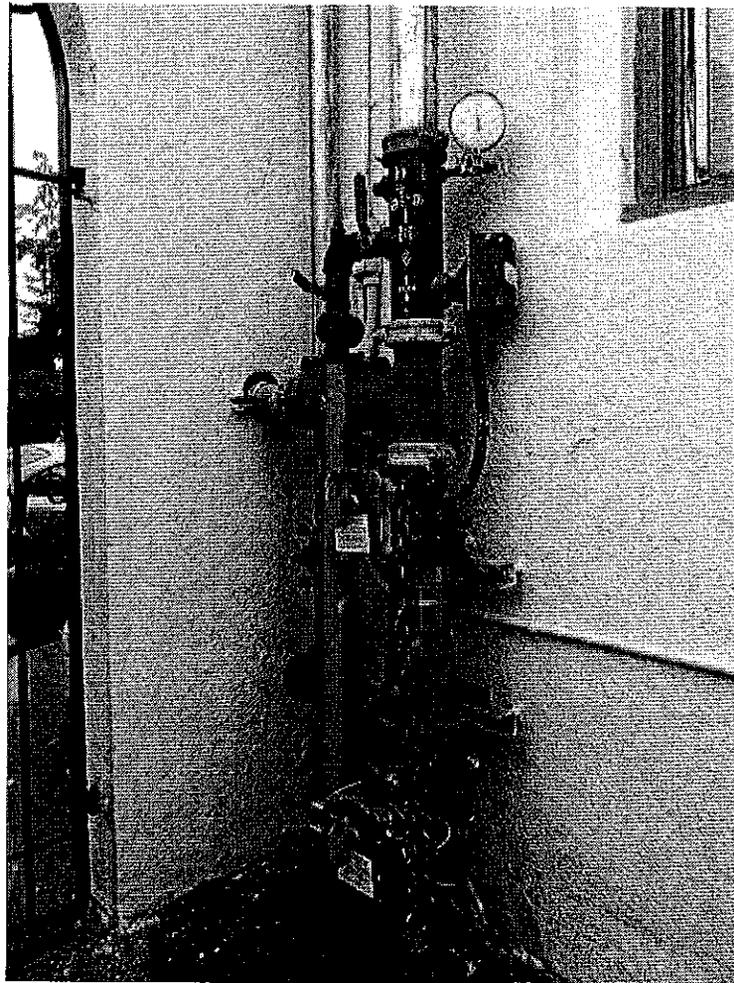


Figure 4 Existing Riser

11. One fire department connection (FDC) is located on the north wall of the building. A single outlet is provided (see Figure 5). As the FDC is connected to a 3-inch sprinkler riser, this is considered acceptable (NFPA 13 Section 6.8.1.3).
12. One horn/strobe alarm is provided on the north wall (see Figure 5). It meets the code requirements specified in CBC 903.4.2 for providing one exterior audible device.
13. According to NFPA 72 Section 10.15, automatic smoke detection is required if the location of the fire alarm control units and the supervising station are not continuously occupied. It is required that a smoke detector be installed at the location of the waterflow monitoring panel (i. e., fire alarm control unit).



Figure 5 FDC and Alarm

14. The building has unrated exterior walls and unprotected windows on all sides.
- a. On the north side, the building opens to Peninsula Avenue. The fire separation distance is assumed to be greater than 30 feet. Therefore, the exterior wall is permitted to be unrated. All windows on the north side are permitted to be unprotected.
 - b. On the south side, the building opens to its private parking lot. The fire separation is assumed to be greater than 30 feet. Therefore, the exterior wall is permitted to be unrated. All windows on the south side are permitted to be unprotected.
 - c. On the west side (the dental office side), the exterior wall is approximately 6.3 feet from the masonry wall along the property line (see Figure 5). According to CBC Table 602, a one-hour rated exterior wall is required, assuming the building is fully sprinklered. The area of unprotected openings in the exterior wall can be up to 25 percent of the wall area per Table 705.8. There is a gas station located on the adjacent property, beyond the masonry wall. The individual fueling stations are approximately 30 feet away from the property line. The gas station is located on a corner lot that is open to Peninsula Avenue and Woodside Way. It is assumed that the subject building's exterior wall on the west side is the original construction and is not fire rated. As no major construction will be planned for the newly remodeled dental office, we suggest that no action is required to upgrade the existing noncompliant exterior wall on the west side of the building during the proposed renovation.

- d. On the east side (the vacant space side), the fire separation distance to the property line is approximately 11.5 feet. According to Table 602, the exterior wall can remain unrated. The area of the unprotected windows in the east exterior wall can be up to 45 percent of the total wall area.

If you have any questions related to this letter, please contact us at 925-314-7910.

Sincerely,

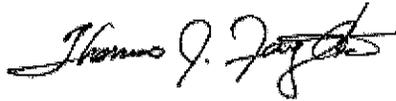
Hughes Associates, Inc.

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