MONTE STOTT AND ASSOCIATES, INC. Consulting Engineers

7 April 2015

Mr. Kim Marienthal Kim@Marienthal.com

Project:

 $669-671\ 24^{TH}\ STREET$

OAKLAND, CA

Dear Mr. Marienthal,

At your request, I visited the subject project site on 6 April 2015 in order to give myopinion regarding structural damage to the building associated with the 21 March 2015 fire. It is my understanding that you are the owner of this building, and that you need this letter to determine if it is safe (from a structural perspective) for your tenants to enter the property to remove their belongings, and/or if it is safe (from a structural perspective) for your tenants to resume their occupancy the property.

The subject structure is a two-story six unit residential building located on the south side of 24th Street on a level lot. The structure is approximately 90 years old, with a front wall constructed of brick, side and rear walls constructed of hollow clay tile, and an elevated floor and roof constructed of wood framing. The structure has a "torch down" roof. The structure appears to have been seismically strengthened to comply with the City of Oakland Mandatory Seismic Strengthening Ordinance. The seismic strengthening components observed included parapet braces, roof/wall ties and floor/wall ties.

The building sustained significant structural damaged in the 21 March fire. The fire was relatively contained in the right (west) rear (south) upper floor unit (669 24th Street, Unit D). The structural damage observed included the following:

- Significant damage was observed in the roof rafters.
- Significant damage was observed in the beam and post supporting the roof rafters.
- Significant damage was observed in the roof sheathing.
- Significant damage was observed in the floor sheathing.
- Some damage was observed in the floor joists, although the amount of debris in the unit prevented me form clearly observing all the floor joints.

The fire damage also significantly increased the earthquake risk associated with the right rear corner of the building, as the roof/wall ties have been compromised by the damage to the rafters as well as to the roof sheathing. Therefore, the existing hollow clay tile walls at the right rear corner of this building are essentially unbraced, and are prone to collapse in even a minor earthquake. Should portions of the unbraced hollow clay tile walls collapse, the floor framing at the right rear corner of the building could fail and collapse into the unit below (671 24th Street, Unit A).

2169 FOLSOM STREET A102, SAN FRANCISCO CA 94110 415 ° 436 ° 0121 FAX 415° 436 °0130 In my opinion, the fire damage noted as well as the resulting increased seismic risk has rendered the two units at the right rear of the building uninhabitable (669 24th Street Unit D and 671 24th Street Unit A), as they are structurally unsafe. The other four units are structurally safe, but the habitability of these four units may be in question due to a number of factors associated with the fire, including mold from water intrusion, electrical issues associated with water intrusion, the "sooty" smell associated with the fire damage, etc. In my opinion, all of the units except for the right rear upper floor unit are safe enough for the tenants to enter and remove their belonging. The damaged belongings observed at the right rear upper floor unit should be removed only after repairs to the roof rafters, roof sheathing and associated roof/wall ties have been made.

I recommend that the fire damage be repaired as soon as possible to mitigate the structural risk associated with the fire damage. In my opinion, the City of Oakland would expedite the structural drawing review to accommodate a permit, as the proposed repairs would be classified as "emergency repairs/shoring."

Please don't hesitate to contact me if I may be of any further assistance on this project.

The items discussed are subject to revision should more information become available. This letter is based on a visual inspection of the property, and while we are experienced in this field and our opinions are based on our best professional judgment, it should be understood that there is no guarantee or warranty expressed or implied with this letter. This letter shall assume no liability, pending further tests and inspections and shall not be relied on as a definitive statement of the condition of the entire property. We were asked to make a brief inspection of the property and give an opinion regarding structural damage to the building associated with the 21 March 2015 fire. Unless otherwise described in this letter, we have not done a detailed investigation of construction drawings, structural dismantling, or testing of construction materials or underground investigations.

Very truly yours,

Monte Stort, P.E.