

***CI-StPaul_LegislativeHearings**

From: Hank Hanten <Hank@travelheadquarters.us>
Sent: Tuesday, December 10, 2013 2:47 PM
To: *CI-StPaul_LegislativeHearings
Cc: Peter Tanis
Subject: 929.West 7th st.
Attachments: Ltr Dobie Eng. Structural Cond. 08022010.pdf

Good afternoon Marcia.

Thank you for working with us on the disposition of the property. We really appreciate it.

As promised I have attached the engineering report and after rereading it see the structural opinion was less than I recalled. That being said as required we will be hiring a structural engineer to evaluate the status of the building as soon as possible.

Also I have reviewed the Vacant Building Performance Bond which we will have in place prior to the 27th but am hoping you can direct me to the city department to contact with questions?

Once again thank you and please contact me at anytime with questions or concerns.

HH

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Thomas S. Hanten
929 West Seventh St.
St. Paul, MN 55102

August 2, 2010

Dear Mr. Hanten,

Subject: Structural Condition, 929 West Seventh St., St. Paul, MN 55102

Earlier today I looked at your building at the location referenced above. I understand that the City of St. Paul has safety concerns regarding the structural condition of the building and has ordered you to have the building inspected by an engineer and repaired.

The building is approximately 40 ft. in width by 125 ft. in depth and is approximately 17 ft. high. The building was constructed as a theatre in about 1914, was remodeled in 1939, and was then converted into a small manufacturing business in the 1960's. The front portion of the building space has a second mezzanine level, which is used for storage. You have used the front part of the building as heated living space and the rear part as an unheated storage warehouse for the past several years.

The building roof's structural system consists of riveted steel or iron trusses spanning about 37ft. from side wall to side wall. The trusses bear on brick masonry pilasters, built into the masonry side walls. The trusses are spaced at approximately 14 ft.. Between the pilasters, clay tile block with brick veneer exterior is used as non-load bearing infill. There is plaster surfacing covering the interior space in the warehouse area, limiting the ability to visually inspect the structural elements, but it appears that there are common wood joists spanning from truss to truss, with a tongue and groove roof deck. There is a dog-house structure on top of the roof at the rear of the building which houses a no-longer-functioning air chiller system.

The roof consists of built-up, hot mopped felt and is sloped from a ridge at the center to the parapets at the side walls. The roof at the side parapets slopes from the rear of the building down toward drains near the front of the warehouse space. A roof drain on each side of the roof originally drained down into the building's sewer system. The drainage was disconnected from the sewer system at some point in time. From the roof drains, the south drain is piped over to join the north drain and then down to ground level, where the drain pipe exits the side of the building. There has been a lot of leakage around the drain at the north side of the building, and the brick masonry veneer is badly damaged for much of the height of the building.

There are numerous leaks in the roof. The built up roof from the center ridge to a point about 12 ft. from the ridge on either side consists of at least a dozen layers of felt (probably representing the original and several re-roofings) and is in poor condition. It appears that the original roof membrane was removed and replaced at some point in time along the right and left parapet walls. This replacement strip is approximately 6 ft wide and extends all along the side parapet walls. Because the replacement strips are probably only half as many felt layers, there is a stress concentration where the strip meets the original, and there is a major split along the roof from front to rear. This is probably the source of many water leaks.

Much of the structural system of the building is not visible. The area of greatest concern is the potential for localized rot of the wood roof joists. The existing built-up roof is in very poor condition and should be torn off. This will allow inspection of the roof deck boards and the supporting roof joists for rot and provide access to facilitate replacement. All the roof truss bearing points should be inspected during the work, although it is unlikely that there are any problems there. Then a new single-ply or built-up membrane should be installed. The roof over the front mezzanine level should also be replaced. The roof trusses were probably designed to adequately support the substantial weight of the chiller dog house, but it probably would be best to remove this structure from the roof to remove this excess weight and simplify the new roof membrane installation. A modern, HVAC unit could probably be installed in place of the chiller at some future time, should the owner want to heat and air condition the warehouse space.

At the roof drain at the north wall, where the exterior veneer is deteriorated, the damaged brick and any damaged tile backing should be removed and replaced. Any new veneer installed should be mechanically tied to the tile masonry backup to assure that they act monolithically. This is a non-structural repair, and can be performed by an experienced mason. A proper roof drain should be installed as part of the roof membrane replacement. If the warehouse space will continue to be unheated, it will be necessary to take measures to assure that ice does not build up and back up in the vertical drain pipe. It may be necessary to heat or insulate the pipe to assure ice does not build up.

As stated above, visual inspection of the structural elements was limited at the time of my inspection. There may be structural problems which become apparent as the corrective work is performed. If you have any questions I can be of any assistance during the corrective work, please do not hesitate to contact me.

Many water leaks were observed during my inspection. My concern during my inspection was the structural integrity of the building. I make no representations regarding health concerns over water leakage, mildew and/or mold. If those are concerns, I recommend that you contact a professional who is experienced at mitigating those issues.

Sincerely,


Terrence R. Dobie, P.E., Minnesota License #12144