



VanBoxmeer & Stranges Ltd.

1108 Dundas Street
London, Ontario
N5W 3A7
P: (519) 433-4661
vbands@vbands.com

4802 Portage Rd, Unit 1
Niagara Falls, Ontario
L2E 6B3
P: (905) 357-2030
al@vbands.com

October 12, 2023
VB&S Project: 23263

PEARLE Hospitality
611 Tradewinds Dr, Suite 300
Ancaster, ON
L9G4V5
Attention: Aaron Ciancone, President

Summary of Building Inspection **535 Old Dundas Rd** **Ancaster, Ontario**

Dear Mr. Ciancone:

As requested, VB&S was instructed to complete a structural review of the building noted above. VB&S scope was to provide visual inspection of the structure and report on the structural integrity. It must be noted that there was no destructive testing to any parts of the building.

On October 11, 2023, VB&S and Mackenzie Meek of Pearle Hospitality completed a walkthrough of the building. This report summarizes our findings of our building review and provides an opinion as to the condition and recommendations.

1.0 General

As reported, the original building was constructed possibly in the early 1900's. The building is comprised of the original structure, and an addition to the north.

The building is constructed using wood framing. The roof is constructed as a conventional wood rafter with collar ties partway up the rafters. It could not be determined if the floor joists act as ties at the base of the rafter. The roof framing over the kitchen bears on knee walls. The knee walls were supported on what appeared to be wood beams from below. See **Photo No 01 & 02**.

2.0 Observations

During the site review, the framing of the floor structure was recorded to get a better understanding of the building and tracking the loads to foundation. Where visible, the framing was recorded including the member sizes, spans and the bearing locations. The underside of the main floor was completely exposed. See **Photo No 03** for part main floor framing.

The underside of the second-floor framing was virtually all covered with drywall and panelling. There was a small opening at the underside of the second-floor by way of a partition wall being removed. The second-floor framing was reviewed and recorded. The framing of the remaining second-floor over the existing kitchen/dining area was not observed.

2.1 Exterior

Review of the exterior was completed. The framing of the covered veranda at the south side of the house had collapsed. See **Photo No 04 & 05**. It was apparent that the end of the wood beam at the east side of the veranda had rotted and collapsed.

There were many areas around the perimeter of the exterior where the wood siding, and wood window sills were rotted as well. See **Photo No 06 & 07**. Photos 06 & 07 show a couple of locations of many where the exterior wood siding, sills or window jambs were decomposed.

2.2 Interior Wood Frame

The interior wood structure at the main floor level was in good condition. There were a couple of areas of the sill plate that was rotted. The photo was difficult to capture.

The west end of the east side main 8x8 timber floor beam, See **Photo No 03**, does have adequate support at the interior foundation wall.

At the west side structure, an existing wood post at the west end of the beam was partially rotted at the base and a wood knot that was severely rotted. See **Photo No 08 & 09**.

After reviewing the joist and beam spans, it appeared that the spans were over the limits allowed by today's codes. After analysis, the following framing members were found to be deficient:

- i) The second-floor joist on the east side of the house were 2x8" @16" joists spanning 233". It could not be observed if there was additional support in the floor that was cutting down the joist span. By analysis the joist, with prescribed by code loads applied, the joists spanning 233" was overstressed by 325%.
- ii) The main floor 8x8 timber beam on the east side of the house supports the 2x8" @ 24" joists (spanning 136") from each side. By analysis, with prescribed code loads applied, the timber beam is overstressed by 70%.
- iii) The main floor timber beam on the west side of the house is a 6x6 and supports the 2x8" @ 24" joists (spanning 80") on each side of the beam. By analysis, with loads prescribed by codes applied, the timber beam was overstressed by 300%.

2.3 Stone Foundation

For two of the 3 areas of the basement, the foundations are constructed of stone and mortar. Upon closer inspection of the foundation, it was quite evident that the mortar is severely spalled. See **Photo No 10 & 11**. The photos show how easily the screwdriver penetrates the spalled mortar joints.

3.0 Recommendations

The existing structure, as determined by analysis is severely over stressed in part. There are many areas of the wood floor structure that do not conform to today's code applied live load.

The mortar joints in stone foundations are severely spalled. Repairing the foundation would also require a lot of financial resources. An option would be the temporary support of the house with a complete demolition and replacement of the stone foundation to cast-in-place or block foundation and footing.

The exterior wood siding has many areas of decomposition. In one location the veranda roof has failed and collapsed. If this structure is to remain, we recommend removing the plaster and lath at the base of the main floor walls to determine if the studs and sill plates are decomposed.

Given the many issues with the floor framing and the foundation wall, we recommend this building be demolished.

We trust that this meets with your satisfaction. Please don't hesitate to call our office should you have any questions or concerns.

Regards,
VanBoxmeer & Stranges Engineering Ltd.



Rick Stranges, P.Eng.
President

RAS/ras

PHOTOS



Photo No 01: 2nd Floor North Wall above Kitchen



Photo No 02: North Kitchen Wall below Photo No:01



Photo No 03: Main Floor Framing (Original House)



Photo No 04: Collapsed Roof



Photo No 05: Rotten Wood



Photo No 06: Rotted Siding



Photo No 07: Rotted Sill



Photo No 08: Rotted Post Base



Photo No 09: Rotten Wood Knott



Photo No 10: Spalled Mortar Joint



Photo No 11: Spalled Mortar Joint