

Project No. 2309

January 28, 2022

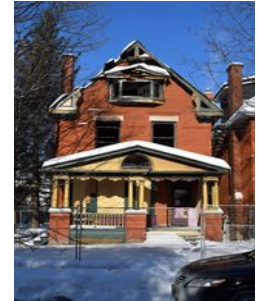
Mr. Jordan Ferraro
Daly Investments Inc.
336 Cathcart St.
Ottawa, ON K1N 5C4

John Buck, CBCO
Chief Building Official, City of Ottawa
101 CentrepoinTE Drive, 2nd Floor
Ottawa, ON K2G 5K7

Dear Messrs. Ferraro and Buck:

RE: Structural Assessment at 323 Daly Ave., Ottawa

We understand that the two-storey dwelling unit at the above mentioned location was severely damaged as a result of a fire incident on November 30, 2021. An engineering assessment report prepared by DFA Engineering Services concluded that the demolition of the building was the most feasible and immediate action to address the unsafe conditions present on site, whereas a report commissioned by the City of Ottawa and prepared by Cooke & Associates indicated that they could not recommend this building for demolition and that stabilization and preservation work should be undertaken.



Claude Pilette, Ph.D., P.Eng.¹, examined the premises at 323 Daly Ave., in Ottawa, on January 28, 2022, to determine the extent of structural damage to the two-storey dwelling unit, and to provide an independent engineering opinion on whether the building was salvageable from a structural viewpoint. This letter report provides a succinct summary of our observations and conclusions. A detailed engineering assessment report can be provided at a later date if required.

We examined the interior of the building to determine the extent of structural damages. We physically accessed the basement space, ground floor, 2nd floor, and 3rd floor attic/loft, and observed the following:

- The cathedral ceiling roof structure on the 3rd floor (loft) was severely fire damaged on its west side, thereby causing the entire roof structure to be unstable.
- The floor joists of the 3rd floor structure (loft) were severely damaged over approximately two-third of the floor area, thereby causing the 3rd floor structure to be unstable.

1 Abbreviated Curriculum Vitae of Dr. Pilette available at <https://www.linkedin.com/in/claude-pilette-146a136b/>

- The floor joists of the 2nd floor structure were also severely damaged over approximately two-third of the floor area, thereby causing the 2nd floor structure to be unstable.
- Most partition and load-bearing stud walls on the ground floor and 2nd floor were significantly fire damaged and were unstable.
- The rear two-storey addition and basement were primarily smoke and water damaged.

Our exterior examination indicated that the pre-existing structural integrity of the stone foundation walls was not affected by the fire incident, and that the load-bearing two-wythe exterior brick walls appeared mostly undamaged.

Our examination and assessment of the extent of structural damages indicated that the 2nd and 3rd floor structures and roof structure were sufficiently damaged to cause a large portion of the building to be unstable. The interior floor structures and roof structure are currently bearing on the exterior brick walls, thus any displacement and/or collapse of the internal structure/roof may cause the brick wall to also become unstable. Environmental loads such as snow, wind and freezing rain can further destabilized the structure. Due to the extent of fire damage to the internal structure and roof, we are of the opinion that it is not practicable and economical to stabilize the fire damaged structure. The interior of the building is too hazardous and unstable to allow access to implement any kind of stabilization program. Any stabilization and preservation effort would need to be done from the exterior using scaffolding/shoring at a much greater cost/time and would be difficult to implement considering the extent of interior structural damages.

Based on our examination and assessment presented above, we are of the opinion that the building is currently too hazardous to implement stabilization and preservation work as requested by others. We are therefore of the opinion that the building should be demolished from a structural assessment viewpoint. We understand that the building is regulated by the Ontario Heritage Act, which may dictate additional requirements. The demolition of the building should take place as soon as practicable by an experienced contractor using heavy machinery.

This concludes our structural investigation at 323 Daly Ave., in Ottawa. If you have any questions or wish to discuss this matter further, please do not hesitate to contact us at (613) 799-3370.

Yours very truly,

PILETTE FORENSIC ENGINEERING



Claude Pilette, Ph.D., P.Eng.