

# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---

October 27, 2024

City of Richmond Hill – Heritage Planning Department  
225 East Beaver Creek Rd  
Richmond Hill, ON.  
L4B 3P4  
Attn: Pamela Vega

**RE: 64 MAJOR MACKENZIE DR  
OBC PART 4 – STRUCTURAL REVIEW  
ASSESSMENT OF FIRE DAMAGED SINGLE-FAMILY DWELLING**

Dear Madam,

We were retained to assess the extent of the fire damage at the existing two storey dwelling that occurred on September 2, 2024 and to provide our opinion on the remaining structural components. We are writing to inform you that in accordance with **Division C, article 1.2.2.1 GENERAL REVIEW**, of the latest edition of the Ontario Building Code, Blue Grove Engineering Group INC. has performed a detailed review of the site conditions post fire on Friday October 25<sup>th</sup>, 2024 and have analyzed the existing remains for structural capacities and reconstruction. Our review on site was visual assessment that did not include any additional destructive discovery. All existing conditions were left as is, with no additional shoring installed at the time of our visit.

It is our opinion that the fire that occurred has resulted in significant unsalvageable damage. A number of building components are charred beyond repair including existing joists and wood beams, exterior and interior studs and sheathing, roof construction rafters and collarties. Additionally, water from the fire hoses and rain, as the roof structure remains open has further damaged the structural framing lumber. The house currently is boarded up by hoarding plywood and should remain inaccessible as it is in a very unsafe condition that can potentially collapse further with minimal applied loading. Furthermore, our office was unable to review much of the existing basement conditions as there was piles of debris within the limited access through the existing stairs.

# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---

It is our recommendation that the existing dwelling be safely demolished for reconstruction. We do not believe that the structural elements are salvageable or reinforceable. Structural reinforcement is possible in some locations but is not a feasible approach to constructing a floor and wall system that meets the requirements of part 4 and part 9 of the Ontario Building Code.

Photos of the existing site conditions are provided below within Appendix A.

If you have any questions or additional concerns, please contact me.

Sincerely,

BLUE GROVE ENGINEERING GROUP INC.



Michael Persechini, P.Eng

# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---

## Appendix A

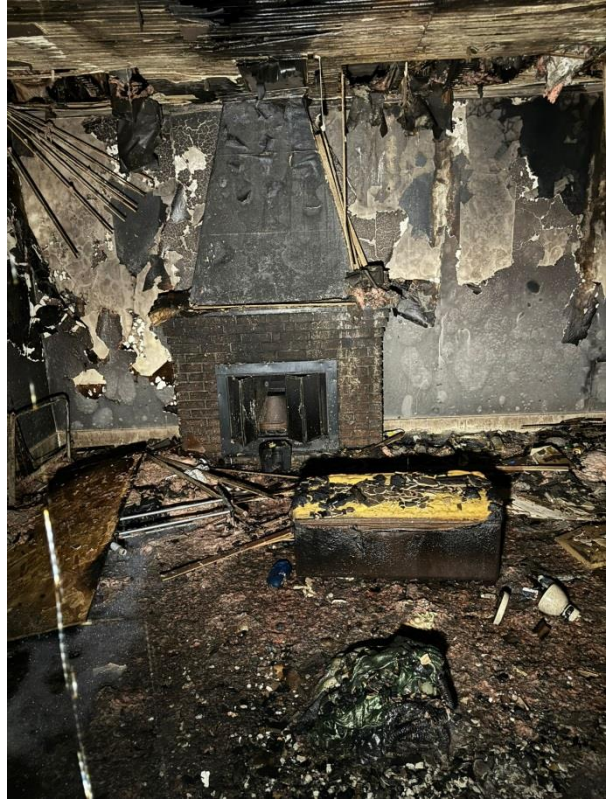




# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---

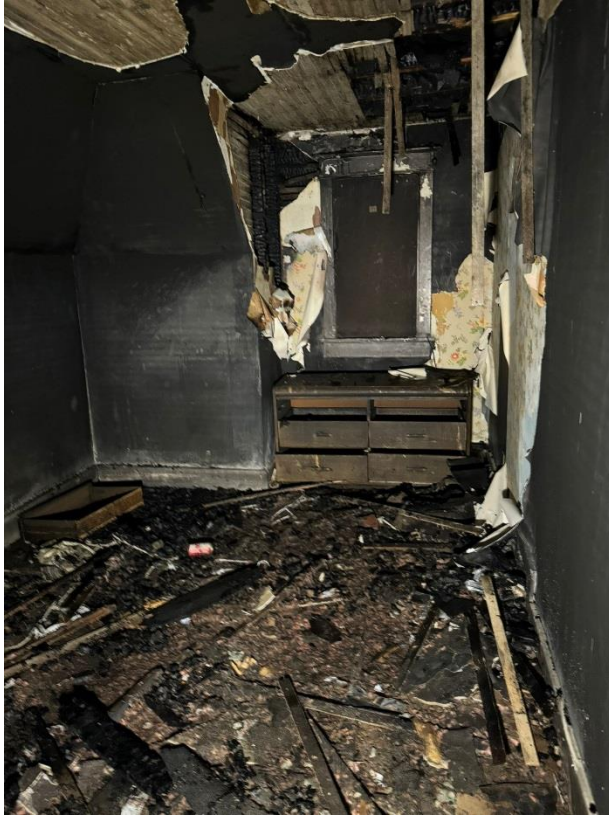




# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---





# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---



# BLUE GROVE ENGINEERING GROUP

PROFESSIONAL ENGINEERS AND PROJECT MANAGERS

---

