Hamann Engineering
Structural Consultants Ltd.

44 Caronridge Crescent, Toronto, Ontario, M1W 1L2
Tel: (416) 391-1676
Email: hamannengineering@outlook.com

June 14 2021

Chris Farner
147 Beach Blvd.
Hamilton,
Ontario L8H 6V8

Re: 983 Beach Blvd., Hamilton
Our Project No. 21041

To whom it may concern:

We visited the above site June 2nd 2021 and met with Mr. Chris Farner. The purpose of our visit was to perform a visual inspection of the condition of the foundations in order to determine to what extent to the structural capacity has been compromised.
Our conclusion is that the foundations are severely compromised by the original type of construction and by weathering and decay over the life span of the building. We recommend the building be demolished, as explained in the body of our report.

EXISTING HOUSE
The existing house was built as a beach front cottage, approximately 75 years ago. The house consisted of a three room bungalow with what may have been an accessible attic. At some point in the history of the building a rear addition and garage were added. See attached front elevation photo.
The floor framing consists of timber joists supported on timber beams. See attached photo 4448. Foundations consisted of timber posts or log sections sitting unimbedded on the insitu beach sand subsoil. See attached photo 4454. There were no exterior foundation walls.
This type of construction is consistent with unheated seasonal summer cottages, built without engineering or compliance with the Ontario Building Code of the day. The nature of the construction is prone to moisture deterioration and decay. This is exacerbated in this house as the front grade has been raised over time, leaving the floor framing buried. See attached photos 4468 & 4469.
The rear addition and garage had been demolished at the time of our visit.

STRUCTURAL CONDITIONS
Due to collapsing of the original timber post foundations over time, loose laid block masonry piers have been added to shore the floor framing and exterior walls. See attached photos 4447 & 4452.
The piers have been arbitrarily jammed below the framing sitting directly on the insitu beach sand. This has left the framing twisted and out of alignment.
Beams have been left without support entirely, as shown in photo 4448.
Joists and beams consist entirely of 2x6 material, and are undersized for the spans as built.

STRUCTURAL REPAIR
The clearance between the floor framing and the grade varies from approximately 20” at the rear to zero at the front.
Repair to meet the Ontario Building code would require permanent frost free foundations to replace the existing adhoc supports.
Ground floor framing would have to be replaced to meet structural capacity requirements as well as removal of moisture damaged timber.
Wall studs in the front half of the house founded below grade are presumed to be moisture rotted due to contact with the soil, and would have to be replaced.

Hamann Engineering
Structural Consultants Ltd.

44 Caronridge Crescent, Toronto, Ontario, M1W 1L2
Tel: (416) 391-1676
Email: hamannengineering@outlook.com

STRUCTURAL REPAIR cont'd
Lifting of the building would be required to conduct the repairs described above, and we consider this to be extremely difficult, if not impossible due the random and disconnected layout of beams and joists.

CONCLUSIONS
It is our opinion there is no merit in terms of cost or quality in restoration/preservation of the existing building. The architecture is very plain and simple and can be reproduced in new construction without loss of character. It is our opinion that even without cost considerations, the building foundation is not repairable without demolition of the above grade structure. We therefor recommend replacement and not rehabilitation for this house.

We trust the above is satisfactory.

Yours truly

HAMANN ENGINEERING
STRUCTURAL CONSULTANTS LTD.

S.D. Hamann, P.Eng.
Attach.

Hamann Engineering
Structural Consultants Ltd.

44 Caronridge Crescent, Toronto, Ontario, M1W 1L2
Tel: (416) 391-1676
Email: hamannengineering@outlook.com

PHOTO 4448

PHOTO 4454

Hamann Engineering
Structural Consultants Ltd.

44 Caronridge Crescent, Toronto, Ontario, M1W 1L2
Tel: (416) 391-1676
Email: hamannengineering@outlook.com

PHOTO 4468

PHOTO 4469

Hamann Engineering
Structural Consultants Ltd.
44 Caronridge Crescent, Toronto, Ontario, M1W 1L2
Tel: (416) 391-1676
Email: hamannengineering@outlook.com

PHOTO 4447

PHOTO 4452