

# SITE VISIT REPORT STRUCTURAL EVALUATION

## **Reference: 79 Dawlish Ave**

### To: Mr. Michael Rozenblit

At your request, a site inspection was performed at 79 Dawlish Ave. Scope of review was structural evaluation of existing building. Inspection was performed on June 28<sup>th</sup> 2010 at 12:30 pm.

#### **Executive summary:**

Building shows signs of an active settlement in the west side. Major cracks are observed at several locations especially at the rear-west portion of the building.

The house was not found structurally stable and therefore it is recommended to demolish the house.

#### **Findings:**

- Building is a single family two storey dwelling house.
- Exterior walls are masonry (brick).
- House has a partial basement.
- Integral-at grade garage is located at west side of the house and one story living space is constructed above the garage.
- Westerly exterior wall is settled more than other parts of the building.
- Garage door's frame is sloped toward the west side (Pic. 1).
- Major cracks are visible on masonry walls around the garage (Pic. 2).
- Major Cracks are measured from 5 mm to 25 mm (Pic. 3).
- The storey above the garage is sunken due to west wall settlement and interior door frames are skewed and sloped toward the west side (Pic. 4).
- Masonry bricks around windows in the basement and second floor are cracked and lintels are damaged (Pics. 5 and 6).

#### **Recommendations:**

- West wall and rear west wall shall be shored as per SK1 details.
- Safety fence and signs shall be installed to keep peoples away from the settled corner of the house.
- Cracks shall be monitored periodically and any sudden change shall be reported to the engineer promptly.
- Space above garage shall be vacant and no extra load be applied to the floor.



- Garage's temporary ceiling shall be removed and shoring be installed under second floor joists.
- The structure is not stable and safe to be used as dwelling unit. Municipal authorities shall be consulted to grant a demolition permit.
- As a result of partial basement location, Garage's footing (west side of the building) is not at the same level of the rest of the building's footing. The un-even settlement is expected to be a continuous issue and we can not provide any repair solution for the current condition of the house. Cracks in the masonry wall have caused structural failure and a patch repair methods will not solve the problem.
- We propose to demolition and rebuild the house. New house shall be founded on natural undisturbed soil with a minimum bearing capacity of 100 KPa for 24" strip footing. A soil report by a geotechnical engineer is required to prevent similar problems for the future structures.

#### **Disclaimer:**

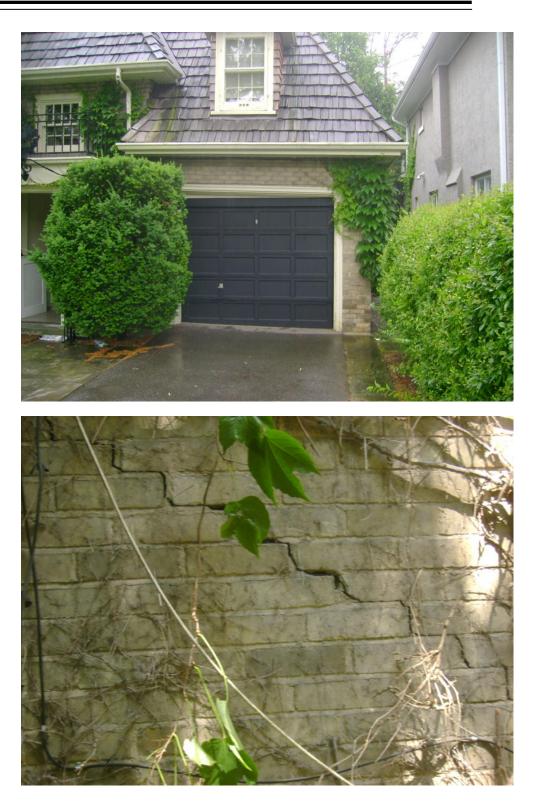
This report is not intended to cover all applicable codes and shall be used in conjunction with an approved building permit.

This report is prepared for **Mr Rozenblit** only. TAHAMI is not liable for third parties loss due to use of the contents of this report or TORT or in any other means.

Hossein Tahami, M.A.Sc., M. Eng., P.Eng.







Picture 1:

Picture 2:





Picture 3:



Picture 4:





Picture 5:

Picture 6: