CONDITION SURVEY

8204 KIPLING AVENUE, WOODBRIDGE, ONTARIO

SOUTH ELEVATION

KEA Report #20071

July 22, 2020

ATTACHMENT 4
8204 KIPLING

Prepared by :

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July 22, 2020

Joan Burt Architect.
310 Delaware Avenue
Toronto, Ontario Tel:(416)533-0072 Joan Burt<joanburtarchitect@rogers.com>

Re: 8204 Kipling Avenue, Woodbridge, Ontario.

As requested by you, we carried out a preliminary investigation for the structural condition of the existing building at the above captioned address. The review was carried out on 13 January 2020. At the site we met Joan Burt architect along with her associate Mel Quirt, Jim the contractor and Gary Tsang the owner of the building.

The purpose of this investigation was to present a brief summary report on the structural integrity of the fabric of the structure and recommendations for structural restoration of the same to meet the current OBC requirements.

General : The building at 8204 Kipling Avenue is an existing 2 storey structure approximately 30' wide in N-S direction in the middle portion and 19' wide N-S wings at east and west ends x 50' long E-W direction with a partial basement. The city records indicate that the original building was constructed around 1880. The building is considered a historic or heritage structure. It is understood that the building was used as a Woodbrige Crossing sales office but is currently unoccupied.
The building is located on the south-west corner of Kipling Avenue and Meeting House Road in Woodridge, Ontario. It was understood that the building had been renovated in the past but no building permit records were available.

Building Construction : At the time of our visit, no existing drawings either structural or architectural were available for review. We walked through the house and we have the following comments :

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Observations:

Basement walls - It was seen that the original basement foundation walls were of rubble stone construction and were approximately 4' below grade. At some point in the past the basement was excavated and deepened using concrete underpinning. We were not able to confirm the thickness of the stone walls or the thickness of underpinning. We were not able to confirm the existence of basement under the east part of the building facing Kipling Avenue.

Perimeter Walls -It was noted that all the perimeter walls above ground are of red brick veneered construction with buff brick trim quoined decorative detailing around corners with arches over the windows. See photos 1 to 4

All interior walls at the main floor and 2nd floor are of 2x4 wood stud construction.

Floor Construction -

Main Floor Framing - It was noted that all original joists for the main floor framing had been removed and replaced with 12" deep fabricated I- joists spanning north-south supported on an intermediate wood beam. However, we were not able to find any stamped description eg name of the manufacturer or strength grade located on the joists to assess its capacity. No mid-span blocking was seen for the main floor framing. See photos 9 & 10.

2nd Floor Framing - The existing 2nd floor construction was finished with gypsum board finish. We removed portions of the drywall in a few locations to observe the structural framing. It was seen that the joists for the 2nd floor above the dining room / reception area were seen to be the original 2x8 @ 16" o/c spanning east-west supported on interior walls. See photo 5. The joists above the front entry / reception room on the east side had been removed and replaced with new 9 ½" deep fabricated I- joists spanning north-south and supported on the north exterior wall and the intermediate wall. In the west side portion of the building, we observed that the original 2x8 joists spanned north-south supported on two intermediate beams spanning east-west. We exposed the south side steel beam to confirm it to be 12" deep with 7 ½" wide x ½" thick flange. See photos 6 & 7

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The beam was supported on a 6” x 6” wood post at each end bearing on the foundation wall on the west side and on the fireplace masonry wall on the east side. The same beam was continued above the fireplace in the dining room with steel column supports. The beam on the north side was noted to be 3 ply 2"x10" deep supported on 4 ply 2x4 wood studs.
See photo 8

Roof Construction - The building has gable ends on all 4 sides with the main ridge running east - west. However, the interior of the roof framing was concealed with gypsum board finish. The rafters are supported on approximately 4' high perimeter walls on the north and south sides with no collar ties. We exposed the roof framing at two locations to find new 2x8 rafters @ 16" o/c spanning east-west. The ridge was noted to be 2 ply 12" deep LVLs - see photo 11. While we could not confirm it on site, we assume that the ridge was supported on 2-2x4 vertical studs at the east and west gable ends as well as on 2-2x4 vertical studs at the 2 interior walls. The southside valley beam was noted to be 2 ply 12" deep LVL (photo 12) and assumed to be supported on 2-2x4 studs.

Relocation of the Structure : In case the building is going to be re-located an independent inspection company should be engaged to document the condition of the existing structure with photographs such as cracks in brickwork etc.
The process of relocation of building must be undertaken only by an insured contractor with previous experience in such projects. The work of relocation would involve installation of temporary framework attached underneath for structural support. Hydraulic jack system or similar should be used to lift the building up off the existing foundations and placing it on flatbed trucks ready for transportation and until safely placed on the new foundations. Special attention should be given not to cause any damage to projecting structures such as chimneys.

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Conclusion: At the time of our visit, the building structure was observed to be in stable condition. While we have commented on the size and the material specifications of the exposed members, detailed analysis of the structural members was not part of our mandate. In our opinion, the 2nd floor joists are capable of supporting the residential loading of the current OBC. While no specifications were found for the wood I joists for the main floor, in our opinion the structure is in acceptable condition to carry the residential loads but not the commercial loading. We were not able to comment on the soil conditions or the size of footings under the walls or the interior posts. Due to lack of proper lighting and limited access it was difficult to find any evidence of wood rot or damage due to water infiltration, condition of the slab on grade and any other deformations in the structure which would be of concern.

We hope the above is satisfactory to you. If, however, you have any further questions please do not hesitate to call our office.

S.H.Katakkar, P.Eng.
Katakkar Engineering Associates Inc.

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Photo 1 Looking To South-West Corner

Photo 2 Looking To North-East Corner

Photo 3 Looking To West Side

Photo 4 Looking To West Side

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Photo 5 - 2x8 Joists 2nd Floor - Living/Dining/Reception

Photo 6 6x6 Wd Post Supporting Steel Beam Storage Room (Main Flr)

Photo 7 - Steel Beam South side Kitchen

Photo 8 - 4 ply 2x10 Beam Main Floor Powder Room

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Photo 9 12" Deep Main Floor I joists on Wood Bm & Post View Looking North

Photo 10 12" deep Main Floor I joists on Wood Bm & Post View Looking West

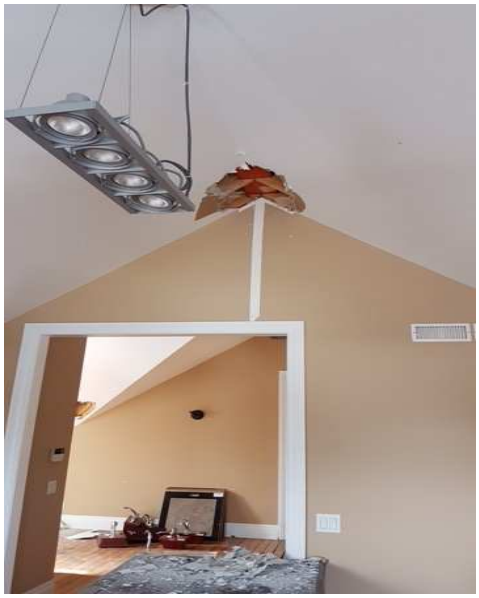

Photo 11 2x8 Rafters on 12" Ridge Beam

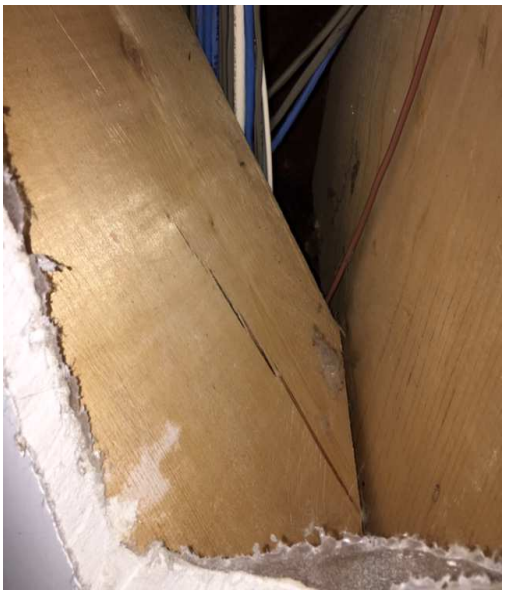

Photo 12 2x8 Rafters on 12" Valley Beam