

# **STRUCTURAL INTEGRITY REPORT**

## **CONDOMINIUM CONVERSION**

**1500 Ouellette Ave.**

**1500 Ouellette Ave.  
WINDSOR, ONTARIO**



**Prepared by:**

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Our Project No.: 22-A170**



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1500 Ouellette Ave.  
1500 Ouellette Ave., Windsor, Ontario**

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## 1. Introduction

This report is intended to provide an overview of the physical condition, in general terms, of the existing structure of the building. It acts as support documentation for a Condominium Conversion Application with the City of Windsor.

The mixed-use building is four (4) stories high above grade and one (1) storey below grade. The building was constructed in 1989. Parking is located at basement level and above grade south of the building. Commercial units occupy the first and second floors and ten (10) residential dwelling units proposed to occupy the third and fourth floors. During our site visit, construction was in progress at the third and fourth floors.

The main mechanical/electrical room for the building is located at basement floor. Other facilities include above ground paved parking area located at the south side of the building.

The building has one main entrance and one exit, the building is served by two elevators and two exit stairs.

Building floors are constructed from hollow core precast concrete slabs supported by steel beams and columns all the way down to footing. Basement level extends beyond building envelop underneath above ground parking area constructed from hollow core concrete slab supported by concrete beam and columns.

The building is clad with exterior insulation finish system (EIFS) and architectural block.

During our site visit personnel from our firm was able to walk through building floors and basement level.

This report is based on visual observations and should only be used as a guide in determining what rectifications may be prudent to consider.

Any testing required lies outside the scope of this assignment.



## 2. Building Structure

### .1 Overview

The original design drawings indicate that basement level is constructed from reinforced concrete exterior walls and hollow core precast concrete slabs supported on steel beams and columns, Basement extends underneath paved parking south of building is constructed from hollow core precast concrete slabs supported by reinforced concrete beams and columns, the floor of basement is 4" thick concrete slab-on-grade.

Structural design drawings for the four levels above grade indicate that primary structural component are precast concrete hollow core slabs and steel framing.

Exterior walls are of metal stud construction with exterior insulation finish system (EIFS) and architectural concrete block. Walls are fastened to concrete slabs and the main steel framing.

Both stairwells are reinforced concrete or concrete block walls from basement to roof. Stairs are precast concrete with steel handrails.

The structural evaluation is based on visual observations. Testing to determine as-built conditions and structural analysis have not been carried out as it is beyond the scope of this report.

### .2 Remarks

- From our observation, it would appear that the condition of the building's overall structure is sound. It appears that, overall, the building is maintained on regular basis.
- Asphalt pavement of the above grade parking area south of the building is extremely deteriorated and the part of the basement underneath the paved area shows signs of concrete delamination and cracks

### .3 Suggested Action

- *It is our recommendation to remove existing deteriorated asphalt pavement, implement top and soffit concrete delamination repairs and install new water proofing membrane before the reinstatement of the asphalt pavement. This work should be done under the supervision of a qualified professional engineer licensed to practice in the province of Ontario.*



**3. Building Interior**

.1 Overview

First and second floors internal walls are constructed of conventional metal stud and drywall. Ceilings are constructed of drywall and lay in tiles. The floors are finished over the structural concrete hollow core slab.

Main mechanical/electrical rooms located at basement level and accessible only from basement. The main electrical, water and communication distributions are centralized in this room.

Basement level internal walls are constructed from masonry or concrete with exposed ceiling (spray fire proofed around all structural members)

At the time of our visit, third and fourth floors were under construction and existing structure was exposed with no partitions and finishes

.2 Remarks

- From our observation, it would appear that the building internal walls, floors and ceiling finishes are in good condition. There were no visible structural cracks or decay in the exposed areas. It appears that the building is maintained on regular basis.
- Basement level overhead door trench cover is deteriorated.

.3 Suggested Action

- *Replace basement overhead door trench cover.*



**4. Building Exterior**

.1 Overview

The building is predominantly cladded with exterior insulation finish system (EIFS) and architectural concrete block.

.2 Remarks

There were some locations where cracking in the exterior insulation and finishing system (EIFS) cladding was noted. These locations are at the corners of windows and between the floors at south and north elevations.

There was one location where cracking in the exterior concrete block was noted. This location is at the concrete block above the lintel of overhead door in basement level.

Notwithstanding the instances noted above, from our observation, it would appear that building cladding is in good condition.

.3 Suggested Action

*It is recommended that cracks in the exterior insulation finish system cladding to be repaired along with the crack noticed in the west wall concrete block wall*

**5. Roof**

.1 Overview

Roofing is multi ply modified bituminous membrane on steel metal deck on steel joists and beam.

.2 Remarks

From our observation, it would appear that the condition of the roof is sound. There were no visible cracks or decay on the exposed areas. It appears that the building is maintained on regular basis.

.3 Suggested Action

*No action is recommended at this time.*



**6. General Statement**


As a result of our visual observations of the existing building not withstand remark indicate previously, it is our opinion that the structural integrity is sound. It appears that the building has been regularly maintained.

Our professional opinion was based on the observations made to exposed surfaces and accessible areas. In order to provide a comprehensive report including the extent of repairs, a full inspection of the building will be necessary.

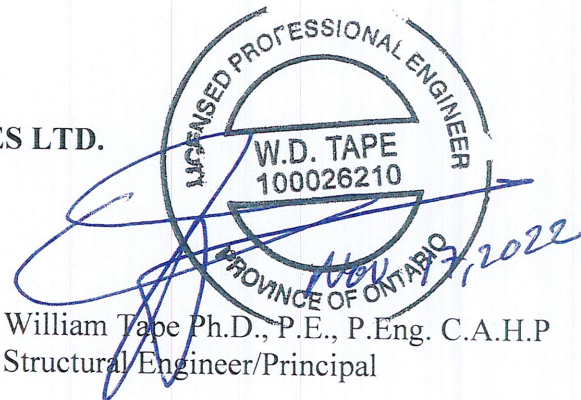
This report was prepared by Haddad, Morgan and Associates Ltd. for the exclusive use as support documentation for a Condominium Conversion Application with the City of Windsor. Please refer to Appendix "A" – Limitations which forms an integral part of this report.

We trust that this report is sufficient for your present requirements. Should there be any comments or points requiring clarification, kindly contact our office.

**HADDAD, MORGAN AND ASSOCIATES LTD.**



Sam Dawood B.Sc. Arch. Eng.  
Principal



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William Tape Ph.D., P.E., P.Eng. C.A.H.P  
Structural Engineer/Principal



## **Appendix “A”**

### **Limitations**

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This report has been prepared by Haddad, Morgan and Associates Ltd. as support documentation for a Condominium Conversion Application with the City of Windsor. The material included herein reflects the best judgment of our staff in light of the information available at the time of preparation. Any use which a third party makes of this report or any reliance on or decisions made based on it are the responsibility of such third party. Haddad, Morgan and Associates Ltd. accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

This assessment does not wholly eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. No physical or destructive testing and no design calculations have been performed. Conditions existing, but not recorded, were not apparent given the level of study undertaken. We can perform further investigation on items of concern if so required. Only the specific information identified has been reviewed. The consultant is not obligated to identify mistakes or insufficiencies in the information obtained from the various sources or to verify the accuracy of the acquired information. The Consultant may use such specific information obtained in performing its services and is entitled to rely upon the accuracy and completeness thereof.

Responsibility for detection of or advice about pollutants, contaminants or hazardous materials is not included in our mandate. In the event the Consultant or any other party encounters any hazardous or toxic materials or should it become known to the Consultant that such materials may be present on or about the jobsite or any adjacent area that may affect the performance of the Consultant's services, the Consultant may, at its option and without liability for consequential or any other damages, suspend performance of its services under our Agreement until the Client retains appropriate consultants to identify and abate or remove the hazardous or toxic materials and warrants that the jobsite is in full compliance with all applicable laws and regulations.

We accept no responsibility for any decisions made or actions taken as a result of this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time. Any user of this report specifically denies any right to claims against the Consultant, Sub-Consultants, their Officers, Agents and Employees in excess of the fee paid for professional services.



**Appendix “B”**  
**Building Exterior Photographs**



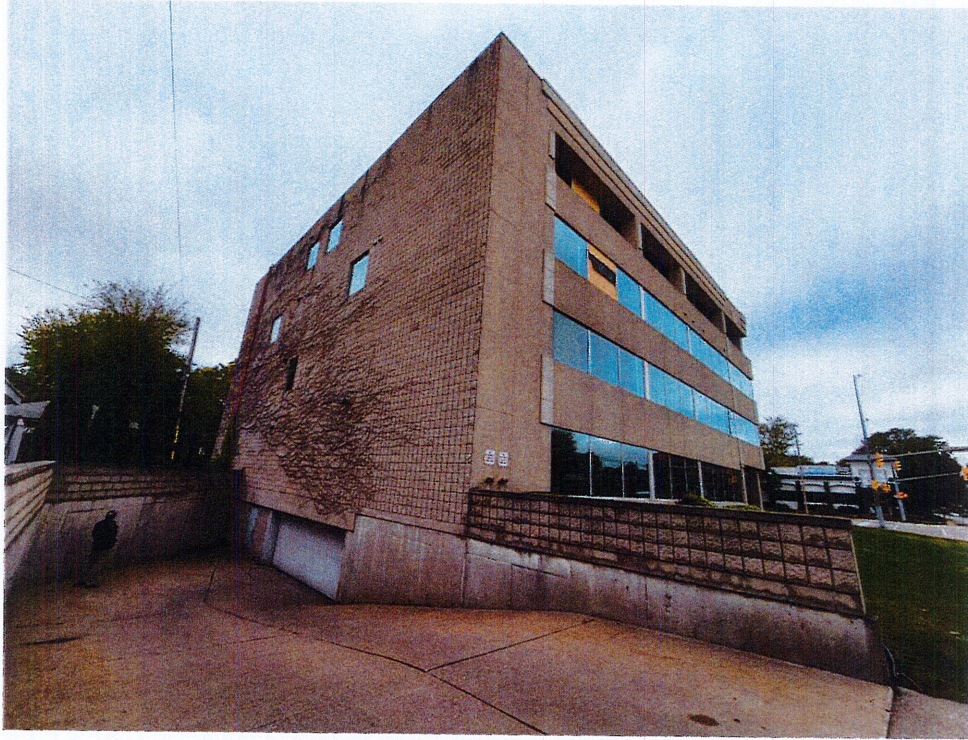


Exterior EIFS façade (deteriorated asphalt pavement)



Exterior EIFS façade





Exterior block façade



Roof





Exterior EIFS cracks at windows



Exterior block cracks at overhead door



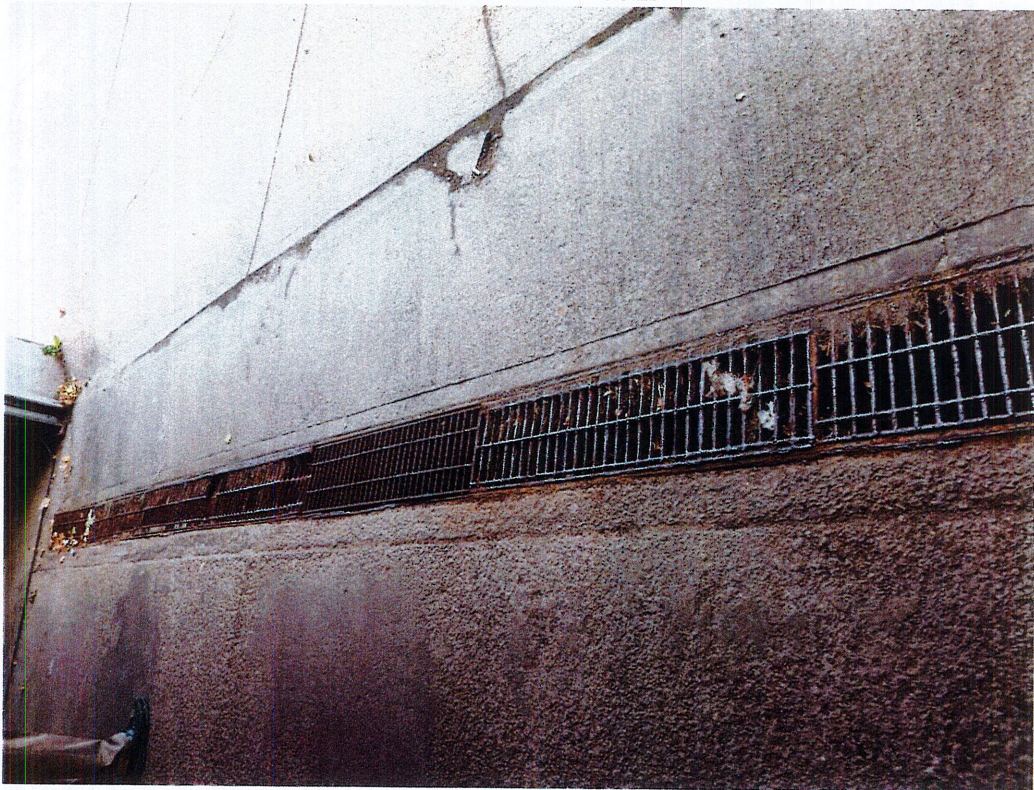
## Appendix "C"

### Basement level Photographs





Main electrical room



Deteriorated drain trench cover





Concrete beam delamination at parking deck



Concrete beam delamination at parking deck