ALLESTER
ENGINEERING LTD.

File No. 26S-0846
Permit to Practice #1005957

September 29, 2026

Re: Structural Condition Assessment of 1837 Hosmer Avenue, Vancouver, BC

Allester Engineering Ltd. (AELM) was retained to conduct a structural condition assessment of the building at 1837 Hosmer Avenue, Vancouver, BC. The assessment was undertaken with reference to the Engineers and Geoscientists BC Practice Advisory: Structural Condition Assessments of Existing Buildings. Original structural drawings were not available for review; therefore, the assessment was limited to visual observations of accessible portions of the building. No finishes were removed, no destructive or intrusive investigation was undertaken, and no structural calculations or detailed seismic assessment were completed. This report identifies observed conditions and provides a preliminary opinion regarding the feasibility of retaining and renovating the existing structure.

The subject property contains a three storey, wood frame residential building reportedly constructed in 1911. AELM conducted a site review on September 22, 2026, consisting of visual observations of accessible interior and exterior areas.

AELM also reviewed the Conservation Plan for 1837 Hosmer Avenue prepared by John Atkin History & Research dated August 24, 2026, particularly the sections titled "Conservation Challenges" and "A Heritage Approach," and the BC Mould Inspections Inc. Mould Assessment Report, Inspection No. BCI022626, based on the February 26, 2026 assessment and issued March 3, 2026, particularly the "Observations 2026 – Summary," sampling results, moisture findings, and "Conclusions and Recommendations." These reports provide heritage and environmental context. AELM did not independently verify their non structural findings.

The scope of the assessment is as follows:

- Identify visually apparent conditions that may present an immediate life safety concern.
- Identify observed structural conditions that are inconsistent with typical current construction practice or that may require further review under Vancouver Building Bylaw (VBBL) requirements.
- Consider, at a preliminary level, the apparent scope of structural repair and upgrading that would be required to retain and renovate the building.
- Document visually apparent structural damage and deterioration in accessible areas.

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Assessment

The observations below are based on conditions visible in accessible areas at the time of the site review. The extent of concealed deterioration could not be confirmed without selective removal of finishes and further investigation.

Damage to the rear portion of the roof has allowed water to enter the building. Broken rafters and openings in the roof assembly were observed, and the soffit was significantly deflected. Evidence of moisture-related deterioration was also observed in the rear portion of the structure. The full extent of the water exposure could not be determined visually. Concealed decay may therefore be present within affected wall and floor assemblies. These conditions represent a potential life safety concern until the affected structural components are exposed, assessed, and, where necessary, repaired or replaced. Deflection or partial collapse of the structure in this area is a possibility.

The building exhibits several visually apparent conditions that are inconsistent with typical current structural practice. Observed concerns include deficiencies in the roof framing and floor systems; an apparent lack of an adequate lateral load resisting system, including limited shear wall capacity; honeycombing in the concrete foundation; likely little or no reinforcing steel in the foundations; localized undermining of the foundation; observably undersized exterior deck framing and stair stringers; moisture related deterioration; inadequate deck foundation support; and a failed retaining wall on the street side of the house. The presence and configuration of footings and concealed reinforcing steel could not be confirmed during the visual review. Based on AELM's engineering judgment and experience with similar buildings, the observed framing and apparent seismic deficiencies present a potential life safety concern for occupants.

Retention and renovation would require extensive investigation and remedial work. Anticipated work includes addressing immediate life safety hazards; controlling water ingress; assessing and remediating mould and moisture related deterioration; exposing structural assemblies to determine the extent of concealed decay; repairing or replacing damaged roof, wall, floor, deck, stair, and foundation components; and upgrading deficient structural systems as required by the proposed rehabilitation and applicable building code requirements. Because many affected components are concealed, the ultimate scope and cost of rehabilitation would remain uncertain until intrusive investigation and design were completed. At a minimum, the anticipated structural work includes a new foundation, framing repairs, and the introduction of a modern seismic force resisting system.

Structural damage was observed at the rear/north portion of the roof in the area affected by a tree impact reported to have occurred during a 2024 windstorm. AELM observed roof related water ingress and moisture related deterioration in the rear portion of the building. Separately, the BC Mould Inspections report documents a 2023 bathroom flood that affected three levels and widespread elevated moisture and mould related damage. Moisture related deterioration was also observed in the deck structure, and portions of the foundations exhibit damage and localized loss of support.

Immediate Actions

The building should remain unoccupied until the identified life safety concerns have been addressed, and a qualified professional has confirmed that occupancy is appropriate. Access should be restricted, and the building should be secured against unauthorized entry.

Recommendations

Based on the extent and distribution of the observed structural deficiencies, the anticipated requirement for replacement of the foundation, substantial reconstruction of existing framing, and installation of a new seismic force resisting system, it is our professional opinion that retention and reconstruction of the existing building is not a reasonable structural approach. Demolition and replacement is therefore recommended from a structural engineering perspective.

Observed concerns affect multiple primary structural components and systems, including the roof, floors, lateral load resisting elements, foundations, deck, and deck stairs, and are compounded by water ingress and the potential for concealed moisture related deterioration. Retention would require substantial intrusive investigation, temporary stabilization, repair or replacement of damaged structural components, and significant structural upgrades. The extent of concealed deterioration creates material uncertainty in both the scope and cost of that work.

The building is understood to be a heritage property. This structural assessment does not determine heritage value or provide planning, conservation, or permitting advice. Before demolition is pursued, the owner should consult the City of Vancouver.

This structural recommendation is consistent with the Conservation Plan's "Conservation Challenges" section, which concludes that retention is not feasible in light of the combined mould, water damage, and tree impact issues. If demolition and replacement proceed, the "A Heritage Approach" section should inform the subsequent design and approvals, including consideration of the First Shaughnessy Design Guidelines, Craftsman-style character, authentic materials, tree retention where feasible, landscape treatment, reuse of the circular driveway, and orientation of the principal entry and driveway toward Hosmer Avenue.

Disclaimer

This report documents the conditions of accessible components and assemblies visually observed during AELM's site review and has been prepared with reference to the Engineers and Geoscientists BC Practice Advisory: Structural Condition Assessments of Existing Buildings. The review was limited to visual observations. No original structural or record drawings were available, and no destructive or intrusive investigation, material testing, structural calculations, detailed seismic assessment, or cost estimate were undertaken. Accordingly, structural deficiencies, deterioration, or life safety concerns concealed by finishes, located in inaccessible areas, or not evident at the time of the review may exist and could not be identified. The opinions and recommendations are based on the conditions observed on September 22, 2026, and may require revision if additional information or concealed conditions become available. The opinion regarding economic reasonableness is qualitative and is not a substitute for a detailed construction

cost analysis. This report does not constitute a heritage conservation assessment, hazardous materials assessment, or comprehensive building code compliance review. AELM accepts no responsibility for concealed or otherwise unobservable conditions.

We trust you will find this letter in order. Should you have any questions, please do not hesitate to contact us.

Sincerely,



2026-10-22

Scott Ash-Anderson, P.Eng.
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