

October 20, 2022

Via email: kyle.kazda@taggart.ca



Taggart Realty Management,
225 Metcalfe Street, Suite 708
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Attention: Mr. K. Kazda, MBA | Real Estate Development Coordinator

RE: 359 KENT STREET FAÇADE CONSERVATION FEASIBILITY REVIEW

As part of the rezoning and official plan amendment application for 359 Kent Street, the City of Ottawa and the Special Design Review Panel have requested Taggart Realty Management (TRM) to retain the south and west facades of the existing Legion to preserve its heritage value. Hobin Architecture has been retained by TRM to incorporate the existing building into the proposed new development, to evaluate the existing conditions of the facades, and review their impact on the energy performance and overall design of the building.

EXISTING CONDITION:

The existing Legion House consists of the original 3-storey Legion House, constructed in 1956 (Figure 1), and a 3-storey vertical addition completed in 1960 (Figure 2). Architectural and Structural drawings for the original three storey Legion House, dated August 5, 1955, were provided for our review.

The heritage survey and evaluation report, dated January 2022, prepared by the City of Ottawa, highlights the significant community value the national headquarters brought to the community. While the international architectural style of the building used quality materials such as limestone for its main facades, it “does not display a particularly high degree of craftsmanship or artistic merit in its expression”, according to the City’s heritage survey and evaluation report. In its context, the building provides a strong corner presence.



Figure 1 - Original 3 storey Legion House

Partners

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The notable south and west building facades are punctuated by long horizontal linear windows. This linear limestone expression is interrupted at the southwest corner by a vertical gesture, highlighting the main entrance. It is important to note that level one is depressed by roughly five feet, requiring an elevator to provide barrier-free access. This issue of accessibility will be addressed in the new proposal. The north and east elevations are clad with brick masonry and will not be retained.



Figure 2 - Current condition, 2022, of Legion House

As described in the structural engineering feasibility review letter, dated October 11th 2022, prepared by Cunliffe & Associates, the Legion House was erected using a steel structure with poured concrete floors supported by open web steel joists. As depicted in Figure 3, the south and west exterior walls are composed of a limestone masonry finish and supported by block masonry wall behind. The exterior wall assembly offers only 1.5 inches of rigid insulation; the R-value of this wall assembly is estimated to be as low as R5 to R8.

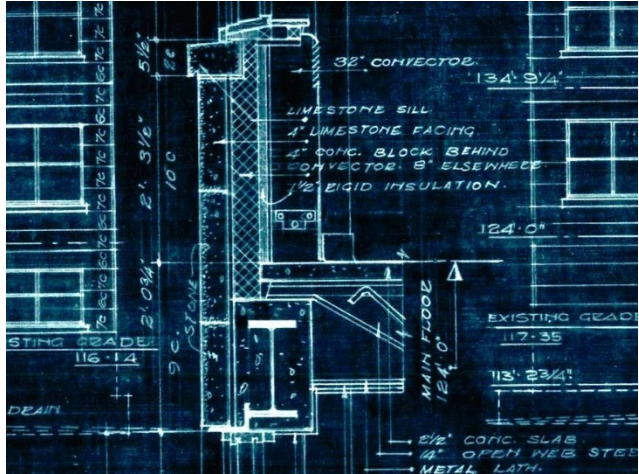


Figure 3 – Existing Legion House wall section



KEY CONSIDERATIONS ON RETENTION VS REBUILD:

Based on feedback from the Special Design Review Panel and direction from various City department (namely Planning and Heritage) the next iteration of the proposed development seeks to re-instate and incorporate the south and west walls of the existing Legion House building into the podium of a 34 storey mixed-use residential tower.

Currently, our recommendation is to:

1. Carry out selective and specialized removal of all limestone panels and other important heritage defining attributes (to be determine in consultation with City Heritage and Commonwealth heritage consultant),
2. Demolish the remainder of the existing building and structure,
3. Construct a new structure and exterior wall assembly in conformance with modern construction techniques and ready to receive cladding,
4. Re-install the existing limestone panels to emulate the current façade.

This approach is based on several considerations, including:

- Existing limestone panel masonry ties are likely in poor condition given their material and age,
- Serious concerns about the integrity of the limestone panels during blasting activities for rock excavation within metres of the façade,
- Structural challenges surrounding the retention of the existing building relative to a new underground parking structure,
- Exterior wall assembly components and the overall environmental performance of the building facades,
- Conformance with the Landmark Building policy under which this development application is being reviewed; and
- Ensuring the heritage attributes of the Legion House are conserved in a long-lasting and conscientious manner.

EXISTING BUILDING & UNDERGROUND PARKING STRUCTURE:

The location of the existing Legion House poses considerable structural challenges as it relates to the new underground parking garage which will serve the new building. The new parking structure intends to sit below the existing building. The various challenges are explained thoroughly in the structural engineer's letter. Without being exhaustive, retaining the south and west walls would require complex and expensive structural solutions to accommodate the construction of a 4 storey underground parking garage below the existing structure.

EXTERIOR WALL ASSEMBLIES:

Exterior wall assemblies and construction methods have changed significantly since the 1950s. Current construction assemblies using similar masonry cladding are developed under the rain screen principle, meaning that while most of the precipitation drains at the exterior surface of the assembly, it is designed to permit a small amount of moisture penetration. Modern detailing of these types of masonry cladding systems are designed to evacuate the moisture penetration through weeping holes and other moisture evacuation methods. Both the south and west facades do not have any weeping holes to



manage moisture infiltration. As pointed out in the structural engineer's report under the section Quality of Masonry Components, there are some concerns with the integrity of both the masonry ties and shelf angles due to potential corrosion. Retention of these facades would require remedial work to be performed to ensure proper anchoring and support of the exterior limestone cladding. Partial removal of the limestone panels will have to be carried out to complete this remedial work.

As described above, the south and west building facades are punctuated by horizontal linear windows. The existing aluminum windows would likely be replaced with a modern glazing system with a properly integrated air/vapor barrier membrane adding to the environmental performance of the building envelope. Given the age of the last renovation, the window panes will need to be replaced with a better performing glazing type.

Additionally, the minimal 1.5 inches of rigid insulation shown in Figure 3 does not provide a sufficient insulation value to meet today's energy performance standards set out in the Ontario Building Code Supplementary Standards, SB-12. We would propose a new wall assembly that would offer a more robust insulation thickness to meet or exceed the current building code requirements, while also considering future requirements.

LANDMARK BUILDING POLICY:

This application is being assessed against the Centretown Secondary Plan's Landmark Building policy, which requires the development to meet the following criteria, among others:

- i) "combine iconic architecture [and] extraordinary site design"; and
- ii) "demonstrate leadership and advances in sustainable design and energy efficiency".

By removing the south and west facades and reconstructing them onto a new structure, we are better able to provide an accessible design without the compromise of matching existing grades. The existing recessed ground floor can easily be reinterpreted into a new cohesive ground floor level accessible to all, enabling extraordinary site design.

The second criteria cannot be met with retention of the existing wall assembly. As aforementioned, OBC Supplementary Standard SB-12 is the minimum requirement as is not met with the current exterior wall assembly. In order to provide a design representing leadership in energy efficiency a new wall assembly needs to be constructed. Reusing the exterior cladding will provide a significant reduction in new cladding materials for the project, a strong example of building sustainability from the procurement stage. This new wall assembly will be designed to provide thermal continuity with the new glazing system, which is likely unattainable with the existing stone cladding and block masonry wall.

HERITAGE CONSERVATION:

The heritage survey and evaluation report prepared by the City of Ottawa highlights the significant community value the national headquarters brought to the community. While the international architectural style of the building used quality materials such as limestone for its main facades, it "does not display a particularly high degree of craftsmanship or artistic merit in its expression", according to the City's heritage survey and evaluation report. In its context, the building provides a strong corner presence. The



proposed conservation method retains the international style, the quality materials, and the strong presence which are key components of the Legion House's heritage value. By reconstructing the materials on a new frame, the lifespan of the Legion House can be significantly prolonged through new masonry support and anchorage components, and an adequately designed rainscreen.

CONCLUSION:

In closing, the retention of the two elevations in question would require complex structural undertakings and a substantial amount of remedial work to meet today's construction standards. Demolishing and accurately rebuilding the south and west facades would allow us to integrate the existing appearance of the building into our proposed development while using current building methods, resulting in a more durable and energy efficient piece of heritage preservation to contribute to the fabric of the community for many years to come. It is our opinion that this strategy meets the City of Ottawa's heritage retention objectives and successfully integrates the presence of this existing heritage component into our proposed development.

Thank you,

A handwritten signature in black ink, appearing to read "Patrick Bisson", with a large, stylized initial "P" and a long, sweeping underline.

Patrick Bisson,

Hobin Architecture Inc.