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REPORT NO. 001

Project name:	Hintonburg Pumphouse Heritage Conservation Approach	Project #: 2143-01

Introduction

The Hintonburg Pumphouse ruin, located at 5 Onigam Street near the Lemieux Water Treatment plant, is the remains of a former building on the shores of the Ottawa River. The original Pumphouse structure was a feature of the town of Hintonburg in its early history, and its heritage value was acknowledged in a designation under Part IV of the Ontario Heritage Act, by the City of Ottawa in 1987.

The building was severely damaged by fire in 1989, and the remaining structure is located on a ~6,000m2 lot owned by the City of Ottawa that is currently zoned 'Parks and Open Space'. Set in the surroundings of the river landscape and the NCC river parkway system, the structure and property are set to be revitalized as a recreational destination for residents and visitors to the City of Ottawa.

i View of Existing Pumphouse Ruin - source CSW

The City has engaged a team of consultants including CSW Landscape Architects, J.G. Cooke and Associates structural engineers, and masonry conservators MH Stoneworks to assist staff in the redevelopment of this property. After extensive analysis of the site and structure and preliminary consultation with representatives from City of Ottawa services, NCC representatives, and various stakeholders, a series of conservation approaches for the structure have been developed.

The team is seeking the expert opinion of the Built Heritage subcommittee on the appropriate treatment for the Pumphouse Ruin.

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History

It is important to acknowledge first the ancient and ongoing history of Indigenous peoples in the Ottawa River Valley, and of the locale and site. The current ruin, and the condition of the land, however, are more directly related to the early days of the village of Hintonburg, which became independent of Nepean Township in 1893. In 1899, the construction of the pumphouse began, as part of a larger project to provide fresh water to the village. Hintonburg joined the City of Ottawa in 1907, and from 1912 to 1917, the pumphouse was gradually phased out of use as more comprehensive water supply infrastructure came online with the construction of the Lemieux Water Treatment Plant.

In 1924, the building and grounds were modified to serve a residence and gatehouse for the Lemieux Island facility. The adjacent properties were largely used for industrial purposes. The last resident of the house, Carden Heeney, remained there until his death in 1980, after which the house was vacant. The empty building was secured with a fence in 1987. The property was also restored and rezoned at this time to help support its eventual adaptive reuse, but was destroyed by fire in 1989. Since that time, the remains of the structure have been deteriorating behind chain-link fences.

ii *View of the original Building - Source City of Ottawa*

Designation

The 1987 documentation for the designation under Part IV of the Ontario Heritage Act includes a Statement of Reason for Designation that describes the former building as follows:

"…a one and one-half (1 ½) storey cut limestone structure with a pitched roof and an open verandah on the south and east facades. The unique features of the building include a circular turret with a conical roof and a large half-round window on the north and south facades.

The entire exterior appearance of this building along with the surrounding grounds are included in this designation. "

It goes on to list the character defining elements as:

- Pitched Roof
- Open verandah on the south and east sides
- Circular turret
- Half round windows.

After the 1989 fire, the roof, turret and the floor of the verandah were all destroyed. In the subsequent years, the unprotected masonry has deteriorated such that little of the half round window on the south façade remains, and the north window aperture is unstable. The surrounding grounds are generally open, with some nearby forests, which have suffered from colonization from invasive species, unstable ground and flooding.

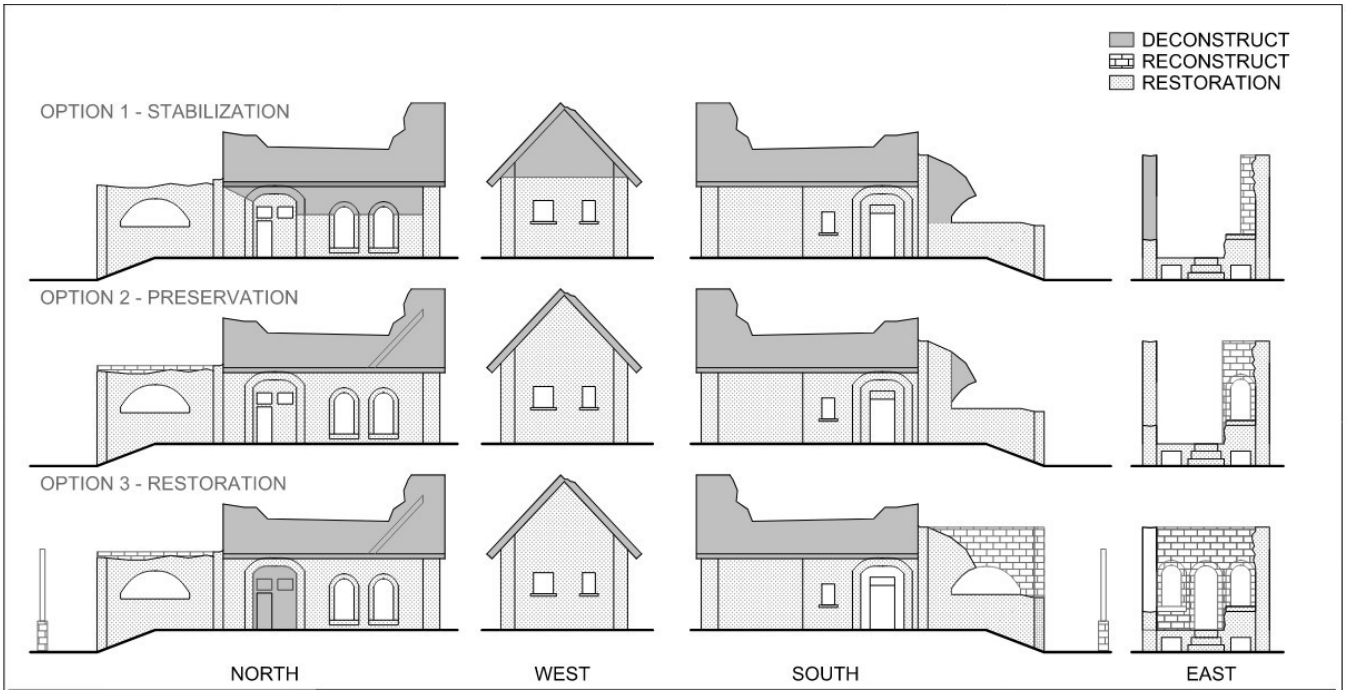
In the 1990's, upgrades to the infrastructure associated with the Lemieux plant resulted in some changes to the grounds, with a steep bank and blast-rock retaining wall installed at the edge of Onigam Street. The majority of the site was cleared and covered with gravel, which provides better vehicular access to the river, which must be preserved, and better visibility of the ruin. The vegetation on site is generally in poor condition.

iii Current Condition of the Ruin - Source: Google Maps

Masonry Assessment (The Cooke Report)

In 2021, John G. Cooke and Associates Consulting Engineers were engaged to assess the ruins and identify what options were available for their conservation. The report identifies critical repairs that are necessary to prevent further collapse and deterioration of the remaining structure. The options were outlined as follows:

- *"Option 1 – Stabilization: Remove any masonry in poor condition, restore the remaining masonry walls and protect by capping skyward facing joints to prevent water infiltration.*
- *Option 2 – Preservation & Protection: Restore all remaining masonry elements by deep repointing, local dismantling and rebuilding, and core consolidation. Protect the masonry walls by capping skyward facing joints to prevent water infiltration, or by a partial self-supported roof structure.*
- *Option 3 – Restoration & Reconstruction: Restore all remaining masonry elements by deep repointing, local dismantling and rebuilding, and core consolidation. Reconstruct collapsed masonry elements based on existing physical evidence and historic photos or documentation. Protect the masonry walls by a self-supported roof structure, supported by the verandah posts."*



iv Illustrations of Stabilization Options - Source: J.G. Cooke

Option 1, the most basic treatment, is the minimum of what is required to prevent further deterioration of the structure, and includes the demolition of existing elements of the ruin that would otherwise require dismantling and rebuilding. Option 2 proposes to retain all aspects of the ruin that are currently standing, with different degrees of intervention proposed to stabilize the most deteriorated elements. Option 3 proposes to retain what remains and reconstruct elements of the building that are currently non-existent.

Some other more specific aspects of the treatment of the structure include:

- Demolition of a small structure on the north façade that is in poor condition with inferior materials and that was added later in the building's history;
- Treatment of the 'basement' – a limited crawlspace on the east side of the building that represents a significant hazard if not stabilized – the options here include rebuilding it with a wood floor, or filling the void with granulars to stabilize it;
- Treatment of the window and door apertures with grilles or other installations to contribute to stability and to limit access if desired, and;
- The potential to add a shelter element to the ruin for shade and protection from rain and snow.

These treatment options were illustrated and explained during the first engagement sessions to solicit feedback on their feasibility, and to assess the community's interest in the various options. While the language of the report does not conform specifically to the terminology used in 'The Standards and Guidelines for the Conservation of Historic Places in Canada', the presentation materials explained the 3 primary treatments of 'Preservation', 'Rehabilitation' and 'Restoration', and roughly translated the conservation options identified in the Cooke report into these terms.

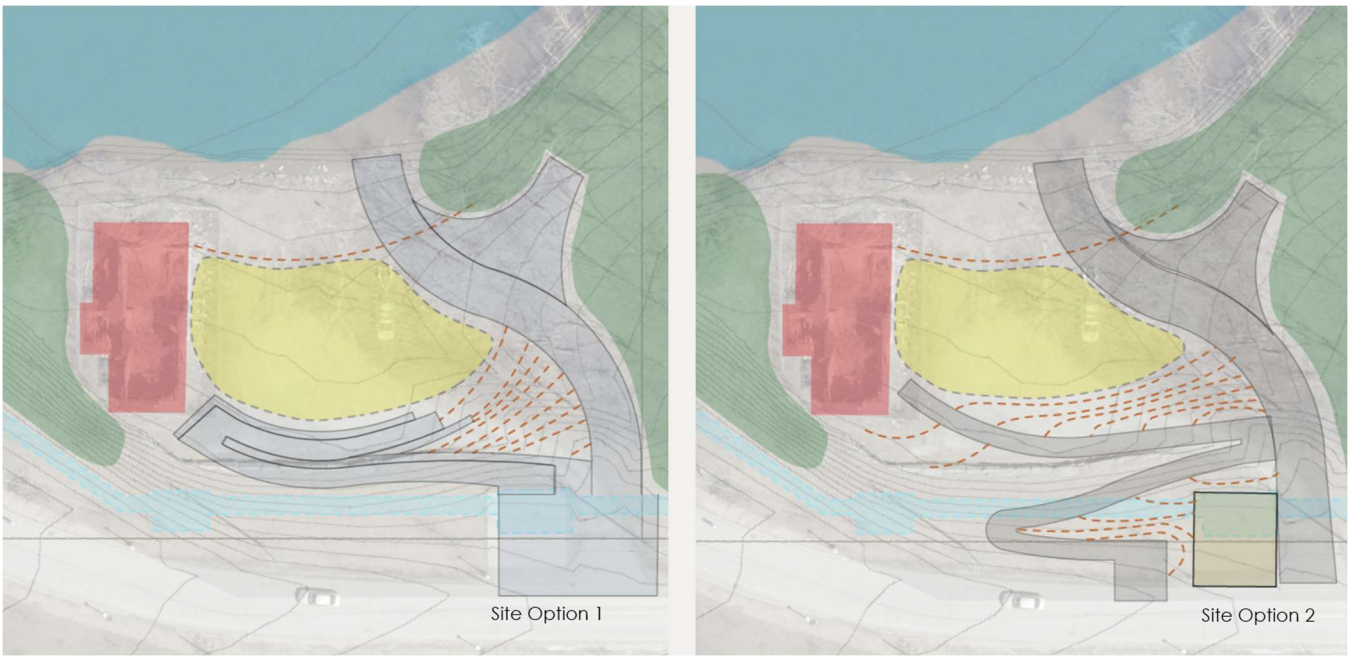
Ruin Treatment Feedback Summary

While several of the participants in the engagement sessions have interest and expertise in the heritage conservation process, there were few strong preferences expressed for any particular conservation option that was described in the Cooke report. Some preliminary assumptions and options were presented to the group in the engagement materials, and summarized with the responses below:

- The 'Restoration' of the original building as a building is not feasible or desirable. Records to undertake this seem to be limited and the cost would be extreme. The value of such a building, particularly considering the impossibility of providing contemporary water or sewer service, would be limited. The approach, rather, is to accept that the events which have occurred that changed this former building into a ruin has created a new heritage character for the structure as a ruin, and not a house.
    - There was no expectation from the group that the ruin would be rebuilt as a house. The purpose or usefulness of a restored building was questioned as not clear public purpose or programming was identified beyond the enhancement of the area for informal open space and public use.

- The 'restoration' of some of the character-defining elements, such as the masonry of the half round windows was proposed as part of Option 3 in the cook report. These elements, if restored, could enhance the value of the structure in its current incarnation, as a 'ruin', and sufficient records existing to match the original forms, materials and detailing.
    - Not rejected, not endorsed. Those consulted seemed to be open to a range of interventions that would support understanding of the original structural form and that would support public access and use as a ruin.
- 'Rehabilitation' treatments proposed included the addition of a roof structure, to expand the usefulness of the structure as an outdoor feature, in inclement weather, and to cap the skyward facing mortar joints, preventing further deterioration of the masonry.
    - This proposal was met with some concern that a roof would encourage undesirable usage of the site, and create damp and shadowy microclimates within the structure. Alternatives that provide shade without shelter, or simply echo and interpret the original elaborate roofline of the house were suggested as alternative options in the feedback.
- Some minor elements are proposed to buttress the remaining walls for the purpose of stabilization. These would be proposed to be distinguishable from the original structure.
    - No objections
- The demolition of the small structure on the north façade was assumed to be appropriate, since it is not designated as a character defining element and would require significant intervention to preserve.
    - No objections
- The rebuilding of the crawlspace with a wooden structure could represent a security hazard of the space, as a concealment point, present unnecessary ongoing maintenance cost, and be at risk of flooding due to the proximity of the high-water levels of the Ottawa river. Filling the space with granular was assumed as the appropriate direction.
    - No objections
- The stabilization of the interior surface of the ruin with either grass, granulars, pavements or other exterior treatment
    - The engagement groups emphasized the importance of a universally accessible entrance to the ruin, and an accessible surface on the interior.
- Closing the openings in the ruin with grilles was proposed as a general intervention for greater security.
    - This was accepted by the group with the caveat that the ruin should be kept 'as open as possible'. Interventions like lockable gates or opaque window closures were not met with favour.
- While the grounds of the building were included in the designation, no specific character-defining elements were identified. The proposal to alter the grounds to support new community use is not considered to be a misuse of the space. Two alternatives to provide universally accessible pathways into the site and up to the ruin were illustrated.
    - Feedback from the engagement session was strongly in favor of a new public space on the grounds, designed to showcase the ruin. The removal of invasive species and poor-quality trees

is supported but the new design should be as 'green' as possible. The accessible route shown in Site Option 2 below, was preferred by the engagement groups.



v Open Space and Accessibility Option Diagrams - Source: CSW

Next Steps and Conclusion

The next engagement session for the redevelopment of the pumphouse is upcoming, and the project team is advancing the materials on the following points, with the confidence that these are necessary steps for the conservation of the ruin and the future usefulness of the site:

- At minimum, the preservation of the remaining elements of the ruin, and the addition of discrete elements, such as new stabilizing buttresses, and capping of the masonry walls, to stabilize the ruins.
- The removal of the late addition on the north facade.
- The stabilization of the basement space by filling with granulars.
- The stabilization of the interior floor surface with an accessible and appropriate material.
- The redevelopment of the site with a park-like open space, and an accessible pathway entrance to the site.

Further information is required for the advancement of the treatment of the ruin in terms of the conservation treatment that is appropriate. The identification of the most appropriate treatment of the ruin presents an opportunity to

update the designation by-law. It is hoped that the fulfillment of a sound approach would allow for the preparation of a revised statement of cultural heritage value which could include a new series of attributes to better reflect the resource's conditions today.

The project team proposes to continue to explore the following points and seeks feedback from the Built Heritage Committee as to which is preferred:

- **Restoration of masonry elements:** the decision of whether to restore the missing masonry elements or not is a major factor in the treatment of the ruin. The project team is proceeding within the Option 2 alternative suggested in the Cooke report. Specifically, to retain and stabilize as much of the of the ruin that are currently standing, with different degrees of intervention proposed to stabilize the most deteriorated elements.
    - With the secluded nature of the site, each of these options will require careful treatment in terms of any grilles installed in the openings in the ruin for security reasons. The project team proposes to develop each of these options with a visual and security analysis. Grill work is being considered for certain openings, windows and doors to not only contribute to structural stability but to manage security and access. The grill work is being considered not only rom a security perspective, but to enhance appreciation and understanding of the structure.
- While restoration of all the character defining elements, such as proposed in Option 3 may not be possible, there may be opportunities for these elements to be referenced. For example, the design team proposes to explore the interior/ exterior interplay of the ruin in the footprint of the verandah through restoration of the original grades, or other respectful reference.
- **Roof or shade shelter elements:** based on feedback from the engagement sessions, the design team does not propose restoration of the existing roof, nor to develop a closed roof option for the ruin. The idea of additions of elements that may provide shade, or interpret the original roofline in respectful fashion are being developed for consideration.
- **Lighting:** While providing permanent water and sewer services to the site is not feasible , it is possible to bring electricity to the site. This makes lighting the ruin possible. While a lighting design has not been specifically advanced pending the more detailed treatment of the ruin itself, feedback on the extents and nature of the lighting would be helpful in the continued development of the project.

As the project continues, the team looks forward to benefiting from the expertise of the Built Heritage Committee and the enthusiasm and input of the going engagement participants. This information will assist in the completion the long-awaited conservation of the remains of the Hintonburg Pumphouse, and the creation of a unique and exciting new public space along the banks of the Ottawa River. Once a preferred design concept is complete, the project team will bring forward a recommendation report to the Built Heritage Committee to seek a heritage permit to alter the property under Part IV of the Ontario Heritage Act.